Danish Research Institute of Food Economics
Rolighedsvej 25
1958 Frederiksberg C
Tel: 3528 6800
Author: Inger Larsen
E-mail: Larsen@foi.dk

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LCAmethod description

LCA project. Method description

1. Introduction

The LCA project uses data from account statistics conducted by FØI (Danish Research Institute of Food Economics) in order to quantify the production on the farm types. These account data are collected in order to produce national account statistics, and to fulfil Denmark's obligation to supply EU with farm account data. Further, the data is often used in research projects, where they may fill a need of economic analysis.

This document gives a short description, how FØI produces the account statistics. The intension of the document is to provide useful background information when a need arise as to form conclusions based on the data in other research projects. There might occur situations where the data will call for carefulness in making conclusions, or situations where conclusions also might be probable based on other background information.

The document contains chapters explaining:

2. The data source used in FØI's selection of samples with accounts
3. Samples selection
4. Calculation of the weighing factors, and their use in projects covering other sub-populations than those used in the account statistics
5. Definitions and descriptions of the variables relevant for the LCA project
6. Types of holdings in the LCA project.
   Main account variables distributed among the respective LCA types of farming

2. Data sources for the FØI account statistics

1. The Farm Structure Survey (FSS)[1] from the year before the relevant accounting year and from earlier FSSs.
2. Data concerning organic farming from the Danish Plant Directory.
3. Data concerning fur-bearing animals from the breeders' organisation.
4. Information covering potentially available accounts, either from the accounting system Ø90 or from other agricultural organisations, accountants, etc.
5. Information about accounts collected for statistical purposes the preceding year. For selection purposes previously collected farm accounts are preferred to new ones.

The data source is the basis for delimitation of the fields of survey (agricultural and horticultural sector), and also for a summary of sup-populations, which have to be represented in the statistics. The agri- and horticultural population consist of all holdings listed in FSS. FSS is in itself a sample survey, excluding holdings of less than 10 ha, unless the holding carries a larger economic importance.

The FØI account statistics also covers the pelt-production sector, which is not a normal part of the FSS.

FØI divides the total sector into an agricultural and a horticultural sector. An agricultural holding is defined as a holding where the Standard Gross Margin[2] (SGM) from agricultural production forms at least 50 percent of the total SGM on the holding. In the FØI statistics, both sectors have a lower limitation of the field of survey. The limitation was changed from year 1999/2000 to year 2000 (discussed in a later chapter). Organic holdings form an integrated subset of each sector.

3. Samples Selection

In the selection of the samples, 1) conventional agriculture, 2) organic horti- and agriculture and 3) conventional horticulture are treated as separate entities. In 1999/2000 3,5 percent, 14,6 percent and 15,0 percent of all holdings respectively were selected. When viewing the sub-populations, however, the selection fraction is highly varied, as a larger fraction of big holdings

[1] FSS is conducted by Statistics Denmark.
[2] Definition of Standard Gross Margins could by find in EU-typology, Commission Decisions of 7. June 1985 Establishing a Community typology for Agricultural Holdings. The SGM-system makes it possible to summarise all activities on a holding (crops and livestock units) into one economic magnitude. See also further description in next chapter.

is selected than of smaller holdings. This is partly in order to compensate for a greater variation in economic results for large holdings, partly to have a sufficiently large number of holdings to be able to represent the smaller sub-populations.

A division into groups of the populations is made (stratification of the population). This division into groups forms the basis of the distribution of the sample on sub-populations. The classification is based the following characteristics:

		Number of groups
1	Agriculture or Horticulture	2
2	Occupational conditions (full- or part time holdings)	2
3	Economic size according to the SGM	11
4	Types of farming	
	4.1 Agriculture	18
	4.2 Horticulture	20
5	Agricultural area	9
6	Age of farmer	5
7	Location (region)	11

The grouping according to *occupational conditions* (including the division into full- and part time holdings) is made on the basis of the amount of *standard working hours* on the individual holding. This is estimated on the basis of a function that considers the extent of the holding activities with crops and livestock. The calculation of function-coefficients for the standard working hours is adjusted once a year based on the analysis of the account material. Holdings with a need of 1.665 hours (= 1 full-time equivalent) and above are defined as full time holdings.

The amount of standard working hours are used to avoid an inexpedient impact from the quality of the labour force, the level of mechanisation of the holding and use of contract-work. This would be the consequence of using the actual working hours as recorded on the holding.

Economic size. The classification according to economic size is made on the basis of the total Standard Gross Margin (SGM) of the individual holding. The SGM express the difference between the gross output and the specific unit costs. The term SGM is developed within the framework of the EU in the 1970's in order to achieve a homogeneous and comparable *economic size unit* for the individual holding irrespective of the type of farming. All types of crops and units of livestock are assigned a weight in the calculation of the SGM. The weights

reflect the economic significance measured by the average gross margin for a given reference period. One *European Size Unit* (ESU) corresponds to a SGM of 1200 Euro.

The type of farming is determined based on the EU typology system. As a main rule a holding is attributed to a given type of farming, when more than 2/3 of the total SGM from the holding comes from a given activity (e.g. crops, cattle, pigs or fur-bearing animals).

Age. The age of the farmer as of June 1 in the sample year is used to devide the accounts into 5 groups:.

Regions. The regional division is based on county borders. The Copenhagen area and Bornholm is considered as one region.

In the actual selection procedure a tabulation based on economic size and types of farming plays a central role. In the agricultural sector it is a matrix with 11*18 (ESU x farmtypes) cells. As already indicated a greater selection fraction is used for big holdings than for smaller holdings. Within each ESU-group the same selection fraction is used for the different types of farming. Selected holdings from a specific cell (ESU * type of farming) are subsequently distributed on the remaining criteria of classification in proportionality with the size of the population. A simple example: when 25 percent of the population is situated on Funen, then also 25 percent of the random sample must be situated on Funen.

4. Calculation of the enumeration factors

Varying fractions of the different size groups are used in the selection, which has to be taken into consideration when using the collected account data. The desired proportional distribution according to the secondary group criteria means that the sample in that respect can be considered as 'self-weighting'. It is an important precondition of the following principals of enumeration. (The description is written in simplified phrases).

- In the first step all holdings in the sample are assigned with a provisional weight reflecting the selection fraction, - reciprocal weighting. These provisional weights refer to data and condition at the time for selection where one-year old data are in question.

- In the next step the provisional weights are brought up to date to reflect structural changes in the field of survey. FSS-data for the weighting purpose must refer to same year as the account data. If the number of holdings – sum of provisional weights versus

FSS-data – in a specific group has changed from 1.200 to 1.300 holdings then all provisional weights are corrected with the given relation. The changes in the field of survey can be explained due to newer FSS-data and use of newer SGM's in the typology. The corrected weights now refer to the same year as the collected accounts.

- In the third step the correct average size of the weighted accounts is ensured - measured as SGM per holding. The true average size for a specific group is compiled on FSS-data. With the purpose of reaching the right average the weights are calibrated once more by the aid of a regression-estimate between each account variable and SGM, where SGM is the independent variable. In this manner all averages of account variables are adjusted according to the relation between each single variable and the SGM. In relation to step two, the total sum of weights within the specific group is unchanged.

- The factors of enumeration of organic holdings are calculated in accordance to slightly different principles, which will not be treated further.

Example of calculation a weight for a single holding in a group with 140 sample holdings.

	-- Number of holdings ---		
	Population	Sample	Weight
1. Step, reciprocal weighting, according to the selection	1200	140	8,57
2. Step, extrapolation to newer FSS-information about number of holdings in the population	1300	Relation: new/old 1300/1200	9,29
3. Step, adjustment to average size in the populations, E.g. adjustment by 3 pct. for this holding		Adjustment factor: 0,97	9,01

The average statistical results per holding for the entire population and delimited sub-population are subsequently calculated by the aid of the assigned and adjusted weight.

A detailed description of the selection and weighting procedures is to be found in a compendium from FØI 'Accounts statistics for agriculture, selection and weighting of account material, Copenhagen 1986, Henning Porskrog' (only in Danish). The statistic sample can be considered to be representative to structural as well as economical proportions in the populations of the holdings with agriculture and horticulture. However, the weighing method cannot completely eliminate systematic errors, and there are still minor biases in terms of representativity.

Concerning the representativity of the statistic it has to be noticed, that the employed procedures in the selection of holdings do not make an objective denunciation of the uncertainty possible, and some results are undoubtedly vitiated by systematic errors.

The factors of enumeration (weights) are created in order to being able to estimate the best results possible for the entire country and some predetermined sub-populations. The standard deviation of the results is generally increasing when it comes to the sub-populations. Furthermore there is a great difference between the relative standard deviation for the individual variables in the accounts. Variables, which are only resorted in a small number of the observations, have larger standard deviation than the variables, which are recorded in all the observations. E.g. the relative standard deviation on investments in cowsheds is larger than the relative standard deviation in the milk profit.

The weighing factors allows for the establishment of sub-populations, which are not known beforehand but still represent the total sector. Thus, the weighing factors were used for the LCA-typology to establish sub-populations, which go across the original sub-populations in the statistics – see chapter 7. This way weighing and summarizing of the account variables across the new typology of sub-populations will correspond to the original countrywide result. Moreover, aggregation of the results from several sub-populations to a more voluminous sub-population is possible by weighting the individual sub-results together. On the other hand there is a limit to the number of sub-populations the account material can be divided into. Too small groups may be biased because untypical holdings used in the sample may influence the average result unsatisfactorily. In the LCA project 31 sub-groups are used as described in section 7 the smallest group contains 16 accounts, which is satisfactory.

5. Definitions and descriptions of the variables used for LCI

5.1. Area and yield

The agricultural area is divided in owned and rented land. Concerning tenancy a distinction is made between total-tenancy, where the tenancy includes all of the holding, and part-tenancy, where the rented area is cultivated as part of holding owned by the farmer. Part-tenancy is the most abundant form in Denmark and the set of accounts is probably not representative with regard to total-tenancies.

The category “other industrial crops” includes flax, mustard, poppy, caraway. “Other seeds” includes seeds from root crops and seeds from vegetables and flowers. Set-aside areas with subsidies also include areas with non-food crops.

It should be noted that the distribution of the different cereal crops varies from region to region due to soft types and climate. Therefore, care should be taken when evaluating the yield difference between the individual cereal crops as well as between the individual regions. t

5.2. Livestock

The ”Output of milk, kg EKM” is the total energy corrected milk delivered to the dairy. The conversion is based on real content of percentage of fat and protein.

Concerning the individual livestock categories it must be noticed that young sows for later use in the breeding are recorded as “other pigs” (pigs for slaughtering). As a supplement to the stock information the amount of livestock units (DE) has been calculated. The calculation is based on the number of annual heads and the official conversion factors from the Ministry of the Environment.[3]

5.3. Labour input

Hours of labour input are recorded both for the farmer family and for the paid labour part on the basis of the amount of effective working hours (manual work as well as the registered part of the farm management). For instance the management includes hours for planning and account keeping as well as hours for purchases and sales in connection with the holding.

The extent of the temporary help and contract-work, which only could be documented in form of paid wages, are converted by means of time wages corresponding to the agreed salary for the C-group of agricultural workers. The salary includes the advance for inconvenience, contribution to a pension fund, and other expenses for the employer. For the working year identical with the calendar year the time wages are calculated to 120 DKK. and for working years different from the calendar year the time wages are 122 DKK.

5.4. Capital inputs

The agricultural assets include all assets that serve agricultural production in the individual holding, i. e. real property, livestock, equipment and stock in trade. The leased assets are calculated on equal terms with assets in the possession of the user. Cash in hand as well as

[3] Departmental order no. 877 of 10. December 1998 on commercial livestock rearing, manure, silage etc

outstanding debts are not included in the specification of the agricultural assets. The residence of the user is not included either.

The value of real property is estimated at a value in cash on the basis of the official assessment on property. For the calendar year accounts the primo- and ultimo values of land and buildings are used as determined on the basis of the assessments per January 1998 and per January 1999. These values are then adjusted for the price development from the date of the assessment to the date of status[4], while almost all accounts with status in the spring- and summer months includes information about the assessments in 1999 and 2000. Investments in real property, which has not yet been valued, are included with the value as it can be expected from the nearest following assessment.

The assessment of value of milk quota is done separately to 80 pct. of the actual price according to the 'quota market', as is it known on the date of status. In the preparation of the account statistic the value of milk quota is specified, but still included under real property.

5.5 Gross output, including subsidies

Gross output is the value of the total production, which originates from:

1. Revenues as a result of direct sales of the products from the holding and as a result of services from the holding to other holdings or occupational groups, including use and hired-out of operating remedies
2. Real-value related changes in stock-values of livestock and stock from the beginning of the year to the end of the year.
3. Provision to private consumption and to employees.
4. Subsidies include set-a-side subsidies, crop area subsidies and livestock premiums as well as subsidies of a general nature

Costs connected to the output values (including damages) are deducted from the sales profits; it includes expenses to drying and cleaning of the cereals and the seed. Furthermore, purchase of livestock is deducted in the calculation of gross output from the respective livestock categories. Other output from cattle and output of pigs is thus reduced by purchases of respectively cattle and pigs while the output from poultry are reduced with purchases of brood eggs, chickens and poultry. The designation "other farm animals" is a residual group like various revenues; other farm animals are livestock, which cannot be referred to a certain livestock activity.

[4] Status is used as a synonym for 'balanced sheet'.

In principle, real-value related changes in stock-values reflect the value of the physical displacement between primo and ultimo, and the price-conditioned changes in the valuating do not figure in the calculations.

The subsidies are divided into three categories: Production subsidies, general grants and one-off subsidies. The production subsidies can be assigned a specific product or a given activity (e.g. rape, nurse cows, beef cattle), while the general production subsidies, which among other things cover subsidies to young farmers, improvement subsidies, environmental grants and subsidies to organic farming, are of a more general character.

Production subsidies and general production subsidies are considered as a part of the gross output. One-off subsidies (e.g. subsidies to shelter planting) are entered into the 'change in net capital' and do not influence the operating profit and the current income.

5.6. Total costs

Total costs mean the expenses, which are connected to the produced gross output. Cost can be divided into the following groups:

1. *Expenses* except interests, farm rent and expenses for purchase of livestock or capital actives.
2. *Reduction of stock in store concerning* purchased feed, manure/fertilizer and other stocks for use in own holding.
3. *Depreciation* on buildings, land improvements and equipment.
4. *Food and other payments in kind* to the staff members.

Maintenance, insurance premiums and land rates, which can be referred to the family's residence or to other independently valued residential building, are not includes in total costs of the holdings.

The chemical-taxes entered from 1996 are included in the expenses of chemicals. Furthermore it should be noted that in some cases, where squirting is carried out by a contract operation, it is not possible to sort out the expense to the chemicals, which is why part of this expense can enter into the contract operation.

The concentrates expenses include the total consumption of the year of purchased concentrates added a possible reduction in the stock of home grown feeding stuff. With exception from such a reduction of the stock in store, the cost does not include consumption of homegrown fodder-

cereals and it is neither counted in the gross output. Purchased feeding stuff includes fodder-cereals, protein-, vitamin- and mineral supplement.

Costs of roughage concerns purchased roughage. When calculating total costs, the homegrown roughage is traded as homegrown fodder-cereal.

The entry ”various” includes all expenses to farmer’s associations and professional magazines plus the holdings share of the total phone expense.

The depreciations concern the building, land improvement and equipment. The building depreciations are based on the replacement value and by use of the “balance method”. The basis of depreciation is indexed according to changes in cost of establishing new buildings. The depreciation percentage, which is fixed proportional to the expected life of the buildings, amounts to 4 percent in average. (In force concerning data used in the LCA project year 1999).

New principles from the year 2000: During a period there has been a considerable difference in the depreciation of the buildings between the account statistics and the sector statistic, which is prepared by Statistics Denmark. A working party with participation from Statistics Denmark, farmer’s associations and Danish Research Institute of Food Economics (earlier Danish Institute of Agricultural and Fisheries Economics). The working party has determined the principles for a new method, where the starting point is the total investments for the sector. This value is used when calculating the total depreciation for the sector compiled on the basis of replacement principal. It is intended, that the depreciation in the account statistics shall be at the same level as the newly calculated depreciations in the sector statistic. This has not been the case, and as a consequence hereof the former published depreciations in the account statistics has been adjusted as from the fiscal year 1990. Thus now there is fundamental harmony between the account statistics and the sector statistic.

Depreciations of land improvement primarily concern permanent installations in connection with drainage- irrigation installations.
The depreciations on the equipments are calculated on the basis of the technical replacement value at the beginning of the year added the net purchase and the calculated real change in equipment capital for the concerned accounting year. In most cases a depreciation percent about 15 are in use based on method “balance method”, although depending on the conditions of the individual holding.

Administrative remuneration, which is settled via the tax payment, has been deducted various expenses. The remuneration is rendered to smaller private enterprises as a compensation for preparation of tax accounts.

Taxation attached to the holding includes tax on property and CO_2-taxes, while SO_2-taxes is part of the energy costs.

5.7. Operating profit from the agricultural holding

The operating profit reflects the gross output of the holding subtracted the operating costs (1999/00).

For the year 2000 and afterwards the previously used “operating profit” as a result for income has now been supplemented with a new result-statement The new “operating profit” indicates the gross output from agriculture minus the operating costs and minus the net interests expenditure (interests expenditure minus the interests received) and tenancy-rents, which all should refer to the agricultural activities (private assessments are excluded). The formerly used statement ”operating profit” has been renamed with ”operating profit before interests”.

The interests received and the interest expenditure is calculated via key-figures. The starting point is the value of the assets in freehold concerning agriculture, other enterprises (includes renting out agricultural assets) and in private assets. Financial assets are not included in the base of distributing, as only farm related enterprises must be loaded with financial costs as net interests expenditure.

The tenancy is spread out between agriculture and private on the basis of the value of the leased agricultural assets and the leased farmhouses. The total tenancy is assigned to the agriculture, where no leased farmhouses exist, which is the case for most tenancy agreements.

6. Types of holdings in the LCA project

In co-operation between DIAS and FØI, FØI’s account material for 1999/00 has been sorted in 31 types of holdings on the basis of the main enterprise, soil type and livestock density as shown in Table 1.

1. The part time holdings (where the economic result of the agricultural holding is of a moderate importance to the farmer) were referred to a special group.

2. The holdings were divided according to major soil type and to relevant main productions, for example milk, pork and potatoes so that relatively precisely defined suppliers can be formed in relation to the agro-industrial business. The horticultural production was not divided into groups.

3. The organic dairy farms, which form the most important organic production in Denmark, has been included in two separate farm types.

4. The major soil and enterprise groups were divided into groups according to livestock density (livestock units per ha). This allows for analyses of effects on the intensity and possibly exports and transport of manure. The livestock densities used to separate between groups are based on legislation, especially the Danish implementation of the EU nitrate directive. Not all limits were in force for the year 1999/00, but they will be force in a few years. The basis for calculation of animal units (DE) is mentioned in chapter 6.1.

On a holding with cattle production the total amount of manure – produced on the holding or delivered from another holding – has to be delimited to a maximum equal to 2,3 DE per ha per year. This rule has been in force up to 1. August 2002. Since August 2002 the maximum limitation is equal to 1,7 DE per ha. However, if more than 70 percent of land (suitable for manure application) is cultivated with sugar beets, grass or cereals with grass aftermath astocking density up to 2,3 DE per ha will still be allowed.

On a holding with pig production or with non livestock production the total amount of manure – produced on the holding or delivered from another holding – has to be limited to a maximum equal to 1,7 DE per ha (equals 100 kg manure – N per ha) usage area per year. This rule has been in force up to 1. August 2002, where after the maximum limit will be 1,4 DE per ha.

Finally it has been a criterion that the number of accounts for the individual group is of a size, which means that there is no doubt that it represents the actual production form.

Table 1. Method and criteria used for establishing farm types on the basis of groups of accounts.

No.	Type	Conditions – in excluding order
	Clay soil (L)	min. 80 pct. of the soil is clay – otherwise this will be classified as sandy soil (holdings with a large production of poultry (min. 10 pct. of the gross output) are not included in this distinction, cf. no. 27, 28 and 29 and organic holdings without dairy cows, cf no. 30 and 31)
1	L-part-time	The holding has less than 832 standard working hours Is this the case the holding will not be included in other groups.
2	L-crop production with sugar beets	Holdings where min.10 pct. of the area is used for sugar beets and with less than 1.4 LSU ha^{-1}
3	L-crop production with seeds	Holdings where min. 10 pct. of the area is used for seeds and with less than 1.4 LSU ha^{-1}
4	L-cattle-convent. < 1,4-harmony	Conventional holdings with dairy cattle (holdings with dairy production which do not receive organic subsidies) with max. 1,4 DE per. ha cultivated area (excl. fallow) Max. 10 pct. of the gross output (BU) comes from pigs.
5	L-cattle-convent. >1,4 and <2,1,/2,3-harmony	Conventional holdings with dairy cattle with between 1.4-2.3 DE per ha cultivated. Max 10 pct. BU from pigs.
6	L-cattle-conventional not in harmony	Conventional holdings with dairy cattle with livestock density above 2,3. Max. 10 pct. BU from pigs.
7	L-cattle-organic	Organic holdings with dairy cattle (receive subsidies for organic farming)
8	L-pigs < 1,4- harmony	Holdings where min.10 pct. of BU comes from pigs, <= 1,4 DE per. cultivated ha. Max. 10 pct. BU from cattle
9	L-pigs, > 1,4 and < 1,7 harmony	Holdings where min.10 pct. of BU comes from pigs, 1,4 – 1,7 DE per. ha cultivated (ex fallow). Max 10 pct. BU from cattle
10	L-pigs, > 1,7 not in harmony	Holdings where min.10 pct. of BU comes from pigs > 1,7 DE per. ha cultivated. Max 10 pct. BU from cattle
11	L-Crop production, mixed	Holdings with < 0,5 DE per. cultivated ha (ex fallow); mixed crop production and livestock production. In addition, holdings where BU >10 pct. from all livestock productions, if the holding does not belong to any previous group
12	L-group for the remains	Other holdings with agriculture. Holdings where BU >10 pct. from all livestock productions, and the holding cannot be referred any previous group
13	L- horticulture	Horticultural holdings – must be placed according to county-code in relation to clay and sand. (Islands = Clay, Jutland = sand) – only if it is not a part-time holding

No	**Sandy soil (S)**	**Holdings which are not included under the category of Clay soil (poultry excepted)**
14	S-part time	The holding has less than 832 hours and does not have suckler cows Then the holding is not included in other groups
15	S-crop production with potatoes	Holdings where min. 10 pct. of the area is used for potatoes and with less than 1.4 LSU ha^{-1}
16	S-cattle-conv, >1,4-harmonic	Conventional holdings with dairy cattle (holdings with milk production, which do not receive subsidies for organic farming) with max. 1,4 DE per. ha cultivated area (excl. fallow). Max 10 pct. BU from pigs

17	S-Cattle-conv, >1,4 and<2,1/2,3 harmony	Conventional holdings with dairy cattle with between 1.4-2-3 DE per. ha cultivated Max. 10 pct. of the gross output (BU) comes from pigs
18	S-Cattle-conv > 2,1/2,3, not in harmony	Conventional holdings with dairy cattle with more livestock than 2,3 DE per. ha cultivated area (excl. fallow). Max. 10 pct. of the gross output (BU) comes from pigs.
19	S-cattle-organic	Organic holdings with dairy cattle. (Receive subsidies for organic farming)
20	S-pigs <1,4 harmonic	Holdings where min 10 pct. of the gross output comes from pigs and max 1,4 DE per. cultivated area (excl. fallow). Max 10 pct. BU from cattle
21	S-pigs, harmonic, > 1,4 and <1,7 harmony	Holdings where min.10 pct. of the gross output comes from pigs with more than 1,4 DE per. ha cultivated (excl. fallow) and up to the limit of harmony 1,7 DE. Max 10 pct. BU from cattle.
22	S-Pigs, not in harmonic	Holdings, where min. 10 pct. of gross output comes from pigs, with more than 1,7 DE per. ha cultivated (excl. fallow). Max 10 pct. BU from cattle
23	S-nurse cows	Holdings with nurse cows
24	S-crop production, mixed	Holdings with < 0,5 DE per. cultivated area (excl. fallow).); mixed crop production and livestock production. In addition, holdings where BU >10 pct. from all livestock productions, and the holding cannot be referred to any previous group
25	S-group of the remains	Other holdings with agriculture holdings where BU >10 pct. from all livestock productions, and the holding cannot be referred to any previous group
26	S-horticulture	Horticultural holdings – must be placed according to county-code in relation to clay and sand. (Islands = Clay, Jutland = sand) – only if it is not a part-time holding
		Not included in the division according to type of soil
27	Broilers	Poultry holdings where there is max. 100 annual heads of hens and other poultry
28	Laying hens	Poultry holdings with max. 100 annual heads of other poultry
		Grouped according to type of soil
29	Other poultry	Poultry holdings which do not fit in no. 27 or 28
30	L-organic	Organic holdings (without milk production, but receiving subsidy for organic farming)
31	S-organic	Organic holdings (without milk production, but receiving subsidy for organic farming)

Table 2 shows the number of accounts behind each farm type and some of the main variables used from the accounts.

Table 2. Main items on the LCA types of holdings

	Clay soil												
Type-kode >	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
Sample, number of accounts	67	88	63	23	32	14	24	50	27	98	53	38	185
Holdings, number	5663	2009	1616	432	849	267	115	1322	424	1437	1983	1219	1133
Holdings, pct.	11,22	3,98	3,20	0,86	1,68	0,53	0,23	2,62	0,84	2,85	3,93	2,41	2,24
Area, pct.	3,9	6,0	6,6	1,7	1,7	0,5	0,4	3,0	1,3	3,8	5,2	1,8	0,6
Animal Units (DE), pct.	0,2	2,7	1,5	1,5	2,9	1,3	0,5	2,1	1,9	9,8	0,3	3,0	0,0
Working hours, pct.	3,0	4,2	3,2	1,4	2,3	0,9	0,4	2,4	1,3	5,0	2,6	2,2	9,0

Gross output, pct.	1,7	4,7	4,0	1,3	2,0	1,0	0,4	2,2	1,5	7,1	2,3	2,1	6,9
Herof													
Crop production. Incl subsidies, pct.	4,0	8,6	7,7	1,0	0,6	0,3	0,1	2,4	0,8	2,9	5,5	0,8	18,3
Livestock production. Incl. Subsidies, pct.	0,3	2,5	1,5	1,5	2,9	1,4	0,5	2,0	2,0	9,7	0,1	2,9	0,1
Hereof cattle, pct.	0,0	1,9	0,4	3,4	6,5	2,9	1,1	0,0	0,0	0,0	0,2	3,6	0,0
Hereof pigs, pct.	0,1	3,8	2,8	0,0	0,0	0,0	0,0	4,5	4,3	22,1	0,0	1,8	0,0
Hereof poultry, pct.	0,0	0,1	0,0	0,0	0,0	0,0	0,0	0,2	0,0	0,0	0,0	0,0	0,0
Costs, pct.	1,9	4,1	3,5	1,2	1,7	0,9	0,3	2,2	1,6	7,7	2,2	2,1	7,3
Hereof													
Raw and auxiliary materials, pct.	1,5	3,9	3,2	1,1	1,6	0,8	0,2	2,2	1,6	8,8	1,8	2,3	6,0
Services	3,6	3,9	3,3	1,3	2,4	1,0	0,5	1,9	1,3	5,4	2,7	2,1	4,4
Depreciation	2,1	4,8	4,1	1,3	2,0	0,8	0,4	2,9	1,8	7,5	3,0	1,9	4,8
Operating profit, pct.	1,0	7,1	6,1	1,7	3,1	1,3	0,6	2,2	1,2	4,6	2,9	1,9	5,2

	Sandy soil												
Type-kode >	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**
Sample, number of accounts	59	62	83	182	16	125	99	38	164	103	52	91	100
Holdings, number	5043	1184	1912	4004	330	695	2319	600	2347	6309	2103	2229	644
Holdings, pct.	9,99	2,35	3,79	7,93	0,65	1,38	4,59	1,19	4,65	12,50	4,17	4,41	1,28
Area, pct.	3,6	4,3	6,0	10,1	0,6	2,7	6,8	1,8	6,1	7,7	6,1	3,6	0,3
Animal Units (DE), pct.	0,2	1,7	6,3	17,6	1,7	3,7	5,4	2,7	15,8	5,0	0,1	6,8	0,0
Working hours, pct.	2,4	2,9	5,4	12,3	1,0	2,5	4,8	1,7	7,8	6,2	2,7	5,4	3,3
Gross output, pct.	1,2	3,3	4,8	11,8	1,2	2,8	4,8	2,1	11,4	3,3	2,5	5,7	2,2
Herof													
Crop production. Incl subsidies, pct.	2,6	6,3	2,8	2,9	0,2	0,8	5,1	1,3	4,2	3,6	5,5	1,8	6,0
Livestock production. Incl. Subsidies, pct.	0,2	1,5	6,1	17,5	1,7	3,9	4,7	2,7	16,1	3,1	0,2	8,2	0,0
Hereof cattle, pct.	0,0	1,7	13,6	39,0	3,9	8,6	0,1	0,0	0,1	4,7	0,4	7,4	0,0
Hereof pigs, pct.	0,0	1,7	0,1	0,1	0,0	0,0	10,3	6,2	35,8	0,9	0,0	4,3	0,0
Hereof poultry, pct.	0,0	0,0	0,0	0,0	0,0	0,1	0,1	0,0	0,0	0,1	0,0	-0,3	0,0
Costs, pct.	1,5	3,1	4,3	10,4	1,0	2,5	5,1	2,3	12,6	4,0	2,4	5,5	2,4
Hereof													
Raw and auxiliary materials, pct.	1,1	3,0	3,7	9,5	1,0	2,0	5,5	2,6	14,8	3,5	2,0	6,0	2,0
Services	2,9	3,1	5,6	14,3	1,5	3,4	4,2	1,8	8,5	6,7	3,1	5,1	1,9
Depreciation	1,6	3,6	4,9	11,0	0,8	3,0	5,9	2,4	11,6	4,6	2,7	4,7	1,3
Operating profit, pct.	0,0	4,1	6,7	17,6	1,6	4,2	3,7	1,3	6,5	0,3	3,0	6,7	1,8

	Not included under soil					
Type-kode >	**27**	**28**	**29**	**30**	**31**	**32**
Sample, number of accounts	37	23	5	30	107	2138
Holdings, number	479	418	27	289	1084	50485
Holdings, pct.	0,95	0,83	0,05	0,57	2,15	100
Area, pct.	1,0	1,0	0,0	0,3	1,6	100
Animal Units (DE), pct.	3,2	1,3	0,2	0,2	0,5	100
Working hours, pct.	1,1	0,8	0,1	0,5	1,3	100
Gross output, pct.	3,0	1,3	0,1	0,4	0,9	100
Herof						
Crop production. Incl subsidies, pct.	0,7	1,1	0,0	0,5	1,3	100
Livestock production. Incl. Subsidies, pct.	4,6	1,4	0,2	0,2	0,5	100
Hereof cattle, pct.	0,1	0,1	0,0	0,1	0,3	100
Hereof pigs, pct.	0,2	0,3	0,0	0,1	0,4	100
Hereof poultry, pct.	73,2	19,6	2,4	2,2	2,4	100
Costs, pct.	3,4	1,3	0,1	0,4	1,0	100
Hereof						
Raw and auxiliary materials, pct.	5,4	1,5	0,2	0,3	0,8	100

Services	0,9	0,9	0,1	0,5	1,6	100
Depreciation	2,1	1,2	0,1	0,3	1,0	100
Operating profit, pct.	1,5	1,1	0,1	0,3	0,8	100