

ALI Inventory 2015

Methodological inventory/questionnaire on the
compiling of Agricultural Labour Input (ALI)

Questionnaire identification

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PART A - DATA COLLECTION

A1 DATA SOURCES

Please indicate below the name and the principal objective of the data sources (direct or indirect) used to compile ALI, indicating for each of them (except for EU surveys) the frequency, the reference period, the enquiry date and the representativeness.

A1.1 PRIMARY SOURCE

A1.1.1 *Survey unit*

Agricultural holdings

A1.1.2 *Scope or coverage*

Farm structure survey (FSO), full census of agricultural holdings (comparable minimal threshold to Eurostat standards)

A1.1.3 *Frequency of the survey*

Yearly for following data:

- crops
- livestock
- jobs

Every 3-5 years for the rest of catalogue (according to Eurostat FSS 2000, 2003, 2007, 2010, 2013, 2016...).

A1.1.4 *Reference period of the observation*

Basically, April-May. Since those last years, tendency is to collect data on jobs as annual averages.

A1.1.5 *Reference period of the results*

ALI is compiled and adjusted to fit the calendar year (full labour input volume of a calendar year).

A1.1.6 *Enquiry date*

Up to 2014: beginning of May. Since 2015: beginning of January.

A1.1.7 Representativeness (share of agricultural industry covered by sample)

The yearly census is based on administrative data and covers over 95% of all holdings. The holdings which are not surveyed in the field of agricultural policy measures (some horticulture holding as well as the agricultural services contractors) are surveyed in the enterprise census (based on the social contributions registers) and every FSS-year by complementary census.

A1.2 SECONDARY SOURCE

A1.2.1 Survey unit

Agricultural holdings.

A1.2.2 Scope or coverage

FADN (Federal Office for Agriculture FOAG, Agroscope), which represents the FADN-universe (agricultural holdings of about 10ha and more).

A1.2.3 Frequency of the survey

Yearly

A1.2.4 Reference period of the observation

Calendar year

A1.2.5 Reference period of the results

Calendar year

A1.2.6 Enquiry date

Between March and June

A1.2.7 Representativeness (share of agricultural industry covered by sample)

About 5% (depending on the agricultural production types).

A1.3 TERTIARY SOURCE

A1.3.1 Survey unit

Enterprises, legal units and local units (establishments), with a specific profiling survey to distinguish the different local units of the multi-site enterprises.

A1.3.2 Scope or coverage

The enterprise censuses of FSO, specifically designated as STATENT (structural business statistics) relies basically on the administrative registers of social contributions (state insurance scheme: comprises the old-age and survivors' insurance). Each job is surveyed beyond a weekly work input of about 7 hours.

A1.3.3 Frequency of the survey

Yearly

A1.3.4 Reference period of the observation

Calendar year

A1.3.5 Reference period of the results

Calendar year

A1.3.6 Enquiry date

Continuous

A1.3.7 Representativeness (share of agricultural industry covered by sample)

In theory, the representativeness is very good. But in practice, the coverage of the agricultural holdings can be problematic, as

- 1) some holdings can be confused with non-agricultural units (agricultural units of administrations, large industry and services firms, hospitals, prisons, etc.)
- 2) some agricultural holdings escape the scope of administrative registers, if the unit is too small, seasonal, or doesn't employ or declare jobs
- 3) timeliness is a problem, as data would come too late for some applications of farm structure surveys

For those reasons, the primary source is always the yearly farm structure survey of FSO. STATENT helps to complete specific parts of agricultural branch (i.e. agricultural services contractors).

PART B - AWU DEFINITION, FULL-TIME AND PART-TIME WORKING

B1 ANNUAL WORKING UNIT (AWU) DEFINITION

B1.1.1 Annual working days

280 working days per year.
This standard (norm) is defined in the « Ordinance for evaluation of the sustainability of agriculture » and is used as a common base for analysis and monitoring: income comparisons, labour input survey and compilations, etc. (Swiss Federal Law: RS 919.118 Ordonnance sur l'évaluation de la durabilité de l'agriculture).

B1.1.2 Daily working hours

10 working hours per working day

*B1.1.3 Annual working hours (B1.1.1 * B1.1.2)*

2800 annual working hours

B1.1.4 Public holidays (number of days)

Public holidays are not included in the 2800 annual working hours.

B1.1.5 Total annual holidays (including public holidays)

Total annual holidays = 85
Calculation:
365 average total annual days
- 280 average total annual working days
= 85 average total annual holidays

B2 FULL-TIME AND PART-TIME WORKING

- B2.1.1 Is the number of hours worked in a full-time job the same for the self-employed and employees in the agricultural industry? If not, please explain.*

Yes, the AWU unit is a standardised labour input volume of 2800 hours, salaried or not.

This standard is about equivalent to the hours worked yearly by self-employed persons (in full-time equivalents).

If jobs in full time equivalents would be considered, then the average number of hours worked per full-time job will be very different between self-employed and employees in the agricultural industry. According to the figures of the Swiss Labour Force Survey, full-time employees in agriculture and forestry work about 43 hours weekly, and self-employed persons work about 60 hours weekly.

- B2.1.2 Is the number of hours worked in a full-time job the same for agriculture and other branches of the economy? If not, please explain.*

No, the number of hours varies significantly from one branch to another, and between salaried and self-employed persons. The full-time equivalent coefficients are defined by the Swiss Labour Force Survey for each section of the NACE Rev.2.

The labour productivity measures performed by FSO (National Accounts) takes those realities into account while compiling productivity measures, which are comparable between the different branches of the economy, as it measures a volume of value added per worked hour.

- B2.1.3 Do you use the FSS to estimate the volume of part-time work in agriculture? If not, please explain how the estimation is made*

Yes.

PART C - CLASSIFICATION OF LABOUR INPUT AND COHERENCE WITH EAA

C1.1.1 Is there a distinction of the volume of work by salaried/non-salaried labour directly available from the data source(s)?

- FSS (Swiss yearly surveys): no
- FADN: yes
- STATENT: no

C1.1.2 If yes, indicate the data source(s).

FADN

C1.1.3 If not, please indicate the source(s) of data and the estimation method(s). (In particular, please indicate in which way the breakdown of the family labour into salaried and non-salaried is made.)

FSS:

- the non family jobs are assumed to be salaried
- the family non holder full time jobs are assumed to be salaried
- the family non holder part time jobs are assumed to be non salaried
- the family holder job is assumed to be non salaried

NOTE: the proportion of labour volume between salaried and non salaried is adjusted together with the FADN proportions, in order to get the necessary cohesion with the compensation of employees (see below C.1.1.5).

STATENT: agricultural services contractor enterprises

- companies: all jobs are assumed to be salaried
- households, private non companies: first full time job is assumed to be non salaried (holder), the rest of jobs are salaried

Specific domain "horticulture" (nurseries and flower-growing): all jobs are assumed to be salaried

C1.1.4 How do you treat the labour input in the case of mutual assistance between agricultural holdings without remuneration in cash? (salaried with remuneration in kind, or unsalaried).

Mutual assistance is not explicitly known. This labour input is treated as described above (C1.1.1 to C1.1.3).

C1.1.5 How do you ensure the coherence between "compensation of employees" (EAA) and salaried labour input? Please explain briefly.

The compensation of employees (please see EAA Inventory) is compiled in domains as followed:

- "Classical" agriculture, covered by FSS and FADN: the volume of labour input is harmonized between salaried and non salaried, as the compensation of employees is an extrapolation of FADN data.
- Horticulture (nurseries and flower-growing companies): it is assumed that all the labour input is salaried. The compensation of employees is compiled as a proportion of output value. Then this item is divided by the average yearly wage (including social contribution of employer) to obtain the measure of labour input.
- Agricultural services contractor enterprises: all the labour input is assumed to be salaried. The observed (or interpolated, or retroplated) volume of labour is then multiplied by the average yearly wage (including social contribution of employer) to obtain the measure of compensation of employees.
- Summer alpine grazing units: labour (wages and social contribution of employer) is part of the costs. The total compensation of employees of this domain is then divided by the average costs per salaried AWU obtained for the "classical" agriculture in order to get an estimation of specific labour input on summer alpine grazing units.

PART D - ANNUAL VOLUME OF WORK ESTIMATION

Please indicate below how you estimate the annual volume of work.

D1.1.1 Is FSS the only data source that you use? If yes, how do you estimate annual data from this single source? Please explain

No.

D1.1.2 Is FSS used in combination with another survey (or other surveys)? If yes, please indicate the data source(s) and the estimation method.

Volume of work: Direct and indirect approaches

It is difficult to measure a volume of work consistent with the agricultural activities evaluated economically in the EAA production limit for a number of reasons:

- Coverage of data is incomplete in the primary sector (small units, seasonal units).
- Jobs recorded for a reference period (FSS) do not correspond to the calendar year (seasonal nature of primary activities).
- The quality of the responses of enterprises or of administrative information (cantonal agricultural records) is uneven. Individual perceptions of "what is a full-time job" differ (an important part of self-employed work).

Given the state of the basic statistics, a set of direct and indirect approaches is therefore needed to estimate a volume of work consistent with the activities covered by the EAA.

In the first instance, the volume of work in hours or annual working units (AWU, standard 280 working days/year or 2800 working hours/year) is estimated at the least aggregated level of the accounts (branches, fields, institutional sectors), divided into employed work and self-employment.

At a second stage, jobs are estimated as full-time equivalents (FTE) and working hours, which is then used as a primary input for labour productivity measures for the whole economy.

To summarize the Swiss approach to evaluate ALI:

Classical agriculture : FADN/FSS/EAA extrapolation (see EAA inventory, chapter D1.1.1), with adjustment based on the yearly variations of the farm structure surveys (FSO).

Nurseries and flower-growing: total compensation of employees divided by average unit compensation (based on salaries statistics by FSO).

Agricultural services contractor enterprises: STATENT (FSO), interpolation and annualisation based on expert values

Summer alpine grazing units: total compensation of employees divided by average unit compensation («classical» agriculture)

D1.1.3 Please explain if you replied NO to both of the above questions.

Doesn't apply.

PART E - DIFFERENCES IN COVERAGE BETWEEN THE FSS AND THE ALI DATA

E1.1.1 How do you estimate ALI for the holdings that are excluded from the FSS because of their size? Please indicate the data source(s) and the estimation method.

This topic has been explained before. To summarize, and applied to the realities significant for Switzerland, FSS doesn't cover the specialised agricultural services contractor units and the summer alpine grazing units, which are therefore estimated with the use of other sources.

For the domain of "classical" agriculture (without nurseries and flowe-growing), FSS is used indirectly as an extrapolation base for FADN data, and to integrate complete branch variations of labour input, as the non adjusted variations from FADN wouldn't show correctly branch structural change as a whole (decrease of jobs from the macro branch scope, opposed to possible increase of jobs from the micro holding point of view, as concentration grows). Furthermore, labour input of the domain "nurseries and flower-growing" is evaluated indirectly, based on the proportion of personal costs in output (JardinSuisse), and divided by average wages (salaries statistics, FSO).