

# ***SLAUGHTERING AND LIVESTOCK***

**Study Visit on Agricultural Statistics - Israel**  
**Rome, 20-23 February 2017**

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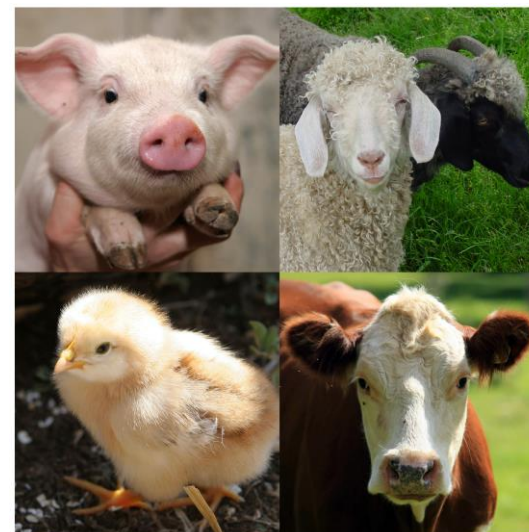
Agricultural Statistics Division

Project manager on:

Animal production statistics

Fishery

Food security



# Index

## Animal products statistics

- Livestock (“red” meat animals)
- Slaughtering (“red” and “white” meat animals)
- GIP Gross Indigenous Production

# Livestock and slaughtering

Regulation (EC) N° 1165/2008 (19 November 2008) repealing Council Directives 93/23, 93/24, 93/25.

The Regulation establishes a common and legal framework for the systematic production of statistics on livestock and meat production in Member States. In particular:

- Statistics on bovine, pig, sheep and goat livestock;
- Slaughtering statistics on bovine animals, pigs, sheep, goats and poultry (slaughtering in slaughterhouses and other slaughtering);
- Production forecasts of beef, veal, pig meat, sheep meat and goat meat.

## Regulation (EC) N° 1165/2008 - **Livestock statistics (Artt. 3,4,5,6,7,8)**

*Each MS shall produce statistics on the number of animals held on agricultural holdings within its territory (at least 95% of entire population as determined by the last survey on the structure of agricultural holdings).*

### Frequency and deadlines

**Cattle – (Bovine and Bufaline)** (more than 1.5 million head) and **Pig** (more than 3 million head) livestock statistics: **twice** a year

**May/June:** deadline 15 September (provisional) - 15 October (definitive)

Regional breakdown: Nuts 1

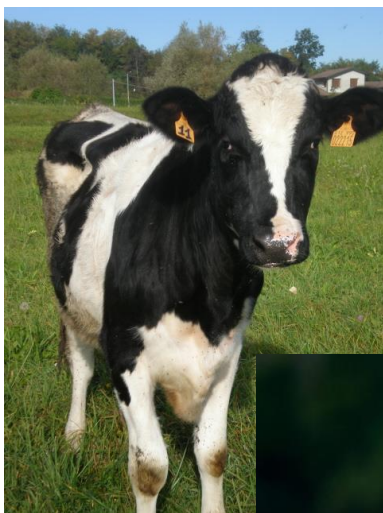
**November/Dec.,** deadline: 15 February (provisional)-15 May (definitive)

Regional breakdown: Nuts 1 and Nuts 2

**Sheep** and **Goat** (both up to 0.5 million head) livestock statistics:  
**once** a year

**November/Dec.:** deadline: 15 February (provisional)-15 May (definitive)

Regional breakdown: Nuts 1 and Nuts 2



## 1. Bovine animals

## 2. Pigs

## 3. Sheep

## 4. Goats

For each group, different categories:

- Age
- Gender
- Purpose

# Livestock statistics

## BOVINE ANIMALS

- Bovine animals aged not over 1 year
  - Calves and young cattle for slaughter
  - other:
    - male
    - female
- Bovine animals aged over 1 year but under 2 years:
  - male
  - female (heifers; animals that have not yet calved):
    - animals for slaughter
    - other

# Livestock statistics

## BOVINE ANIMALS

- Bovine animals of 2 years and over:
  - male
  - female:
    - heifers:
      - heifers for slaughter
      - other
    - cows:
      - dairy cows
      - other
- Buffaloes:
  - female breeding buffaloes
  - other buffaloes

# Livestock statistics

## PIGS

- piglets with a live weight of less than 20 kg
- pigs with a live weight of 20 kg or more but less than 50 kg
- fattening pigs, including cull boars and cull sows with a live weight:
  - of 50 kg or more but less than 80 kg
  - of 80 kg or more but less than 110 kg
  - of 110 kg or more
- breeding pigs with a live weight of 50 kg and over:
  - boars
  - covered sows, of which:
    - sows covered for the first time
    - other sows, of which:
      - gilts not yet covered



# Livestock statistics

## **SHEEP**

- Ewes and ewe lambs put to the ram
  - milk ewes and milk ewe lambs put to the ram
  - other ewes and ewe lambs put to the ram
- Other sheep

## **GOATS**

- Goats which have already kidded and goats which have been mated
  - goats which have already kidded
  - goats mated for the first time
  - other goats

# Livestock statistics

## Regulation (EC) N° 1165/2008

### Precision requirements

*Sampling errors for the results of each MS shall not exceed (with a confidence interval of 68%):*

- ✓ **1%** of the total number of **bovine animals**
- ✓ **1.5%** of the total number of **cows**
- ✓ **2%** of the total number of **pigs**
- ✓ **2%** of the total number of **sheep and of goats**

# Livestock statistics

## **Animal livestock survey**

*(bovine animals, pigs, sheep and goats)*

- **Phenomena:** animal population
- **Periodicity:** twice a year (June, December)
- **Sample and analysis Unit:** agricultural holdings
- **Sample size:**
  - **6.000 on June (Bovine animals and Pigs).**
  - **9.000 on December (Bovine animals, Pigs, Sheep and goat)**

# Livestock statistics

## ***Animal livestock survey***

*(bovine animals, pigs, sheep and goats)*

- **Methodology:** stratified sample
  - number of animals (classes)
  - species of animals
- **Inclusion probability:** same for all units
- **Selection scheme:** random
- **Survey technique:** Computer Assisted Telephone Interviewing

# Livestock statistics: CATI

## Material for the enterprises

Before the interview, are sent:

- a letter with the aim to inform about the survey purposes, the information that will be asked, the legislation concerning the obligation to answer and the data confidentiality,
- a questionnaire and the instructions for the filling,

# Livestock statistics: CATI

## Material for the company charged of data collection:

- Instructions;
- Questionnaire;
- Legislation concerning the obligation to answer and the data confidentiality;
- List of the farms to be interviewed;
- Records definition (ISTAT→Company and Company →ISTAT);
- Check of mistakes and inconsistencies;

# Slaughtering statistics

## Regulation (EC) N° 1165/2008 - Slaughtering statistics (Artt. 9,10,11,12)

*“Each MS shall produce statistics relating to the number and carcass weight of bovine animals, pigs, sheep, goats and poultry slaughtered in slaughterhouses on its territory.... It also shall supply estimates of the extent of slaughtering carried out other than in slaughterhouses...”*

### Frequency and deadlines

- ✓ Slaughtering in slaughterhouses:
  - ✓ *monthly* (reference period: calendar month).
  - ✓ Deadline: within 60 days following the reference period
- ✓ Slaughtering other than in slaughterhouses (e.g. in Italy is not relevant) :
  - ✓ *annually* (reference period: calendar year).
  - ✓ Deadline: before 30 June of the following year

# Slaughtering statistics: categories

- **Bovine animals**

- Calves
- Young cattle
- Heifers
- Cows
- Bulls
- Bullocks

- **Pigs** (No breakdown)

- **Sheep**

- Lambs
- Others

- **Goats** (No breakdown)

- **Poultry**

- Chickens
- Turkeys
- Ducks
- Others



# Slaughtering statistics

## Monthly slaughtering surveys

*(bovine animals, pigs, equidae, sheep and goats)*

- **Phenomena:** monthly meat production (fit for human consumption)
- **Methodology:** stratified sample (400 units)
  - Owner of the slaughterhouse (private/public)
  - Slaughtering potential (number of animals that can be slaughtered)
  - Geographical division (NUTS 1)
- **Sample and analysis unit:** slaughterhouses
- **Variables:** number of animal slaughtered, weight and carcass weight

# Slaughtering statistics

## Monthly slaughtering surveys

*(bovine animals, pigs, sheep and goats)*

- **Inclusion probability:** same for all units
- **Selection scheme:** random
- **Survey technique:** Computer Assisted Telephone Interviewing
- **Quality adjustment and non response treatment:** coherence with other sources (Administrative data from Ministry of Health), comparison with the time series
- **Data dissemination:** Istat publications and website, Eurostat

# Slaughtering statistics

## Monthly other slaughtering

*(bovine animals, pigs, equidae, sheep and goats)*

- **Phenomena:** monthly meat production other than in slaughterhouses
- **Methodology:**
  - fixed coefficient calculated on an algorithm
  - “ad hoc” survey for other slaughtering
  - elicitation-estimate by expert opinion
- **Sample and analysis unit:** e.g.veterinary services, ecc.
- **Variables:** number of animal slaughtered other than in slaughterhouses, weight and carcass weight

# Slaughtering statistics

## Monthly slaughtering surveys (*poultry*)

- **Starting year:** 2001
- **Phenomena:** monthly meat production (fit for human consumption)
- **Methodology:** census (**about 200 units**)
- **Analysis unit:** slaughterhouses
- **Variables:** number of animal slaughtered, weight and carcass weight

# Slaughtering statistics

## Monthly slaughtering surveys *(poultry)*

- **Survey technique:** Computer Assisted Telephone Interviewing
- **Quality adjustment and non response treatment:** coherence with other sources, comparison with the time series
- **Data dissemination:** Istat publications and website, Eurostat

## Meat production forecasts - GIP

### **Regulation (EC) N° 1165/2008 – Meat production forecasts (Artt. 13,14,15,16)**

*“MS shall produce forecasts of their supply of bovine animals, pigs, sheep and goats.”*

*This supply shall be expressed as the **Gross Indigenous Production**  
(number of animals slaughtered plus the balance of intra-Community and  
external trade in live animals)*

# Meat production forecasts - GIP

## Regulation (EC) N° 1165/2008

### Categories of Meat production forecasts (Artt. 13,14,15,16)

#### ✓ **Bovine animals**

- calves and young cattle
- heifers
- cows
- bulls and bullocks

#### ✓ **Pigs**

- no breakdown

#### ✓ **Sheep**

- no breakdown

#### ✓ **Goats**

- no breakdown

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## Quality report

### **Regulation (EC) N° 1165/2008 – Quality assessment and reports (Art. 17)**

*“Every 3 years , and for the first time by July 2011, MS shall provide the Commission with a report on the quality of the data transmitted”*

# The Istat current software: AGAIN

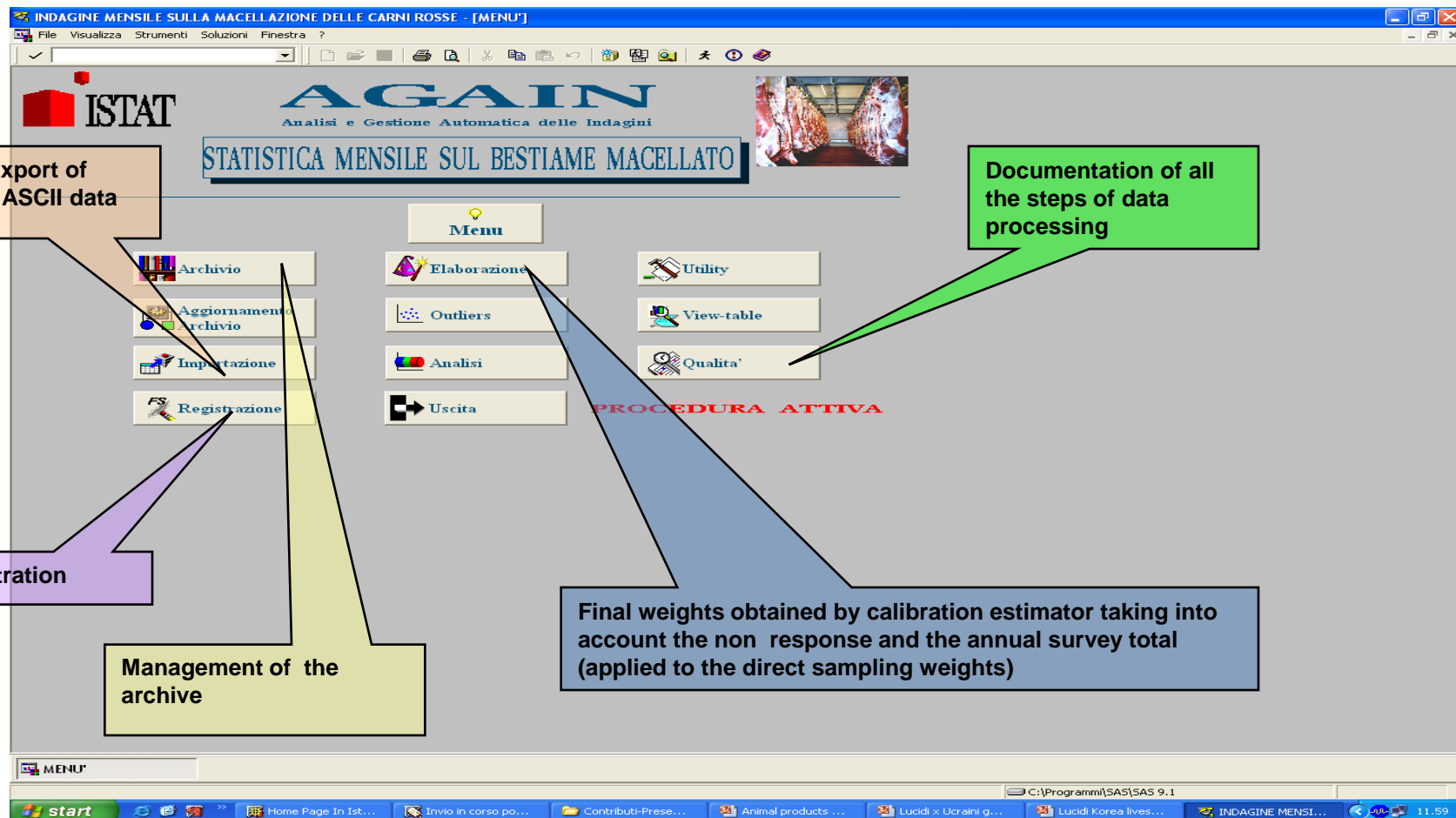
AGAIN is an user-friendly and flexible system that provides for each survey an automatic solution to all the data processing steps.

It has been set up using the frame technology of SAS.

The software architecture has been designed to support the following main functions:

- basic utilities;
- estimation;
- data editing (check and control) and automatic correction
- computation of quality indicators and documentation.

# The Istat current software: AGAIN



# Data dissemination

**Final figures** are sent to Eurostat through E-Damis and disseminated on the web, in the Istat official web site: <http://agri.istat.it>

The screenshot shows the Istat.it website interface. At the top, there's a blue header with the Istat.it logo and navigation links: home, data, documentation, useful links, map, contact us, versione italiana. Below this, the main content area is titled 'Agriculture and livestock'. On the left, a navigation menu lists various categories: economic results of agricultural holdings, agricultural prices, farm structure, crops, livestock and animal production (with sub-items like milk and dairy products, livestock, slaughtering, monthly data on white/red meat, annual data on bovines/buffaloes/pigs/sheep/goats/birds/rabbits/equidae, and livestock import-export), PDO, PGI and TSG quality products, agritourism, production means, forestry, hunting, and fishery. On the right, a list of tables is displayed, including Tab. B01A (Bovine and buffaloes stocks), Tab. B01B (Bovine animals and buffaloes alive), Tab. B02 (Pigs), Tab. B04 (Sheep, goat and equine stocks), Tab. B05 (National cattle population), Tab. B06 (National pig population), and Tab. SPA01 (Farms with livestock by species).

Path: Home : data : browse data : livestock and animal production : livestock

- ▶ economic results of agricultural holdings
- ▶ agricultural prices
- ▶ farm structure
- ▶ crops
- ▼ livestock and animal production
  - ▶ milk and dairy products
  - ▼ livestock
    - ▼ slaughtering
      - ▶ monthly data on white meat
      - ▶ monthly data on red meat
      - ▶ annual data bovines and buffaloes
      - ▶ annual data on pigs
      - ▶ annual data on sheep and goats
      - ▶ annual data on slaughtering of birds and rabbits
      - ▶ annual data on equidae
    - ▶ livestock import-export
  - ▶ PDO, PGI and TSG quality products
  - ▶ agritourism
  - ▶ production means
  - ▶ forestry
  - ▶ hunting
  - ▶ fishery

- Tab. B01A - Bovine and buffaloes stocks on first December, by bovine animals less than two year old
- Tab. B01B - Bovine animals and buffaloes alive on first December, by bovine animals older than 2 years and by bovine animals in total (number of heads)
- Tab. B02 - Pigs on first December (number of heads)
- Tab. B04 - Sheep, goat and equine stocks, by category (number of heads) on first December
- Tab. B05 - National cattle population (in thousands) on first June Year 2012
- Tab. B06 - National pig population (in thousands) on first June Year 2010
- Tab. SPA01 - Farms with livestock by species of livestock

**THANK YOU  
FOR YOUR ATTENTION!**

