

## AGRICULTURAL PRODUCTION (2019)

### NATIONAL REFERENCE METADATA IN SINGLE INTEGRATED METADATA STRUCTURE (SIMS)

#### **CONCEPT 1 - CONTACT**

##### **Sub-Concept 1.1: Contact organisation**

National Statistics Office (NSO)

##### **Sub-Concept 1.2: Contact organisation unit**

Environment, Agriculture and Fisheries Statistics Unit

##### **Sub-Concept 1.3: Contact name**

Mr. Ronald Tanti

##### **Sub-Concept 1.4: Contact person function**

Head of Unit

##### **Sub-Concept 1.5: Contact mail address**

National Statistics Office (NSO),  
Lascaris, Valletta, VLT 2000, Malta

##### **Sub-Concept 1.6: Contact e-mail address**

[ronald.tanti@gov.mt](mailto:ronald.tanti@gov.mt)

##### **Sub-Concept 1.7: Contact phone number**

+356 2599 7333

#### **CONCEPT 2 – METADATA UPDATE**

##### **Sub-Concept 2.1: Metadata last certified**

2<sup>nd</sup> March 2021.

##### **Sub-Concept 2.2: Metadata last posted**

9<sup>th</sup> March 2021.

##### **Sub-Concept 2.3: Metadata last update**

9<sup>th</sup> March 2021.

## **CONCEPT 3 – STATISTICAL PRESENTATION**

### **Sub-Concept 3.1: Data description**

Animal production statistics cover three main sub-domains based on three pieces of relevant legislation:

- Livestock and meat statistics are collected under [Regulation \(EC\) No 1165/2008](#). These cover monthly meat production, as activity of slaughterhouses and annual livestock statistics. All the data regarding meat statistics together with cattle, sheep and goats' stocks is obtained from the civil abattoir while for the pig stocks a census is undertaken among the breeders.
- Milk and milk product statistics are collected under Decision 97/80/EC implementing [Directive 96/16/EC](#). They cover farm production and utilisation of milk (annual), collection (monthly for cows' milk) and production activity by dairies (annual) and statistics on the structure of dairies (every third year). Such data are collected entirely from the Malta Dairy Products.
- Statistics on eggs for hatching and farmyard poultry chicks are collected under [Regulation \(EC\) No 617/2008](#) for implementing [Regulation \(EC\) No 1234/2007](#) (Single CMO Regulation). They cover annual statistics on the structure and the monthly activity of hatcheries as well as reports on the external trade of chicks. The data are obtained directly from the civil abattoir.
- Crops' statistics are based on [Regulation \(EC\) No 543/2009](#). They cover crops from arable land, permanent crops and agricultural land use. Administrative data are used for such data collection.

### **Sub-Concept 3.2: Classification system**

- Classification regarding livestock and meat statistics is based on the definitions found in [Regulation \(EC\) No 1165/2008](#).
- Classification regarding milk and milk product statistics is based on the definitions found in [Decision 97/80/EC](#) implementing [Directive 96/16/EC](#).
- Classification regarding statistics on eggs for hatching and farmyard poultry chicks are collected under [Regulation \(EC\) No 617/2008](#) for implementing [Regulation \(EC\) No 1234/2007](#) (Single CMO Regulation).
- Classification regarding crops statistics are based on [Regulation \(EC\) No 543/2009](#).

### **Sub-Concept 3.3: Sector coverage**

#### Livestock statistics:

Cover the number of bovine animals, pigs, sheep and goats held on agricultural holdings within its territory. When conducting sample surveys, these cover enough agricultural holdings to account for at least 95% of the entire population. Administrative sources are used for all livestock except for pigs, as an annual census is undertaken.

#### Milk and milk products statistics:

Data regarding fat content of milk and cream collected and the protein content of the cows' milk collected is received on a monthly basis through an administrative source. Likewise, the quantity of fresh milk products processed and manufactured dairy products is also collected every month. Annual data collection includes statistical data regarding use of raw materials in the form of whole milk and skimmed milk and the amount used in the manufacture of dairy products.

#### Eggs for hatching and farmyard poultry chicks' statistics:

Monthly statistical data regarding the production and marketing of eggs for hatching and of farmyard poultry chicks is received from an administrative source. Statistics on external trade in chicks are designed to reflect foreign trade in chicks from hatcheries with more than 1,000 incubation places.

#### Crop statistics:

Cover statistics on identified crops and the utilised agricultural area. Surveys carried out represent at least 95% of the total area under cultivation of crops from arable land, total harvested area of vegetables, melons and strawberries, total production area of permanent crops, and utilised agricultural area.

### **Sub-Concept 3.4: Statistical concepts and definition**

Classification regarding livestock and meat statistics is based on the definitions found in [Regulation \(EC\) No 1165/2008](#); whereas:

1. Agricultural holding - means an agricultural holding as defined in Article 2(a) of Regulation (EC) No 1166/2008 of the European Parliament and of the Council of 19 November 2008 on farm structure surveys and the survey on agricultural production methods (3);
2. Sample survey - means a sample survey as defined in Article 2(c) of Regulation (EC) No 1166/2008;
3. Bovine animal - means domestic animals of the species *Bos taurus* and *Bubalus bubalis*, including hybrids like *beefalo*;
4. Pig - means domestic animals of the species *Sus scrofa domestica*;
5. Sheep - means domestic animals of the species *Ovis aries*;
6. Goat - means domestic animals of the subspecies *Capra aegagrus hircus*;
7. Poultry - means domestic birds of the species *Gallus gallus* (chickens), *Meleagris spp.* (turkeys), *Anas spp.* and *Cairina moschata* (ducks) and *Anser anser dom.* (geese). Domestic birds of the species *Coturnix spp.* (quails), *Phasianus spp.* (pheasants), *Numida meleagris dom.* (guineafowl), *Columbinae spp.* (pigeons), and *Struthio camelus* (ostriches) are included. It excludes, however, birds raised in confinement for hunting purposes and not for meat production;
8. Slaughterhouse - means an officially registered and approved establishment used for slaughtering and dressing animals whose meat is intended for human consumption.

Classification regarding milk and milk product statistics is based on the definitions found in [Decision 97/80/EC](#) implementing [Directive 96/16/EC](#):

1. Fresh produce – Drinking milk, buttermilk, cream, acidified milk, drinks with a milk base and other milk products (milk jelly and others).
2. Manufactured products – Concentrated milk, powdered dairy products, butter and other yellow fat dairy products, cheese, processed cheese, caseins and caseinates, whey, total and other manufactured products

Classification regarding statistics on eggs for hatching and farmyard poultry chicks are collected under [Regulation \(EC\) No 617/2008](#) for implementing [Regulation \(EC\) No 1234/2007](#) (Single CMO Regulation):

1. Eggs for hatching - means poultry eggs falling within subheadings 0407 00 11 and 0407 00 19 of the Combined Nomenclature intended for the production of chicks, classified according to species, category and type and identified in accordance with this Regulation, produced in the Community or imported from third countries;
2. Chicks- means live farmyard poultry the weight of which does not exceed 185 grams, either produced in the Community or imported from third countries and falling within subheadings 0105 11 and 0105 19 of the Combined Nomenclature, of the following categories:
  - (a) Utility chicks means chicks of one of the following types:
    - (i) Table type chicks: chicks intended to be fattened and slaughtered before reaching sexual maturity;
    - (ii) Laying chicks: chicks intended to be raised with a view to the production of eggs for consumption;
    - (iii) Dual-purpose chicks: chicks intended either for laying or for the table;
  - (b) Parent stock chicks: chicks intended for the production of utility chicks;
  - (c) Grandparent stock chicks: chicks intended for the production of parent stock chicks;
3. Establishment- means the establishment or part of an establishment for each of the following sectors of activity:
  - (a) Pedigree breeding establishment: an establishment for the production of eggs for hatching intended for the production of grandparent stock, parent stock or utility chicks;
  - (b) Breeding establishment: An establishment for the production of eggs for hatching intended for the production of utility chicks;
  - (c) Hatchery: an establishment for incubating eggs, hatching and supplying chicks;
4. Capacity - means the maximum number of eggs for hatching which may be placed simultaneously in incubators excluding hatchers.

Classifications regarding crops statistics are based on [Regulation \(EC\) No 543/2009](#):

1. For the purposes of this Regulation, the following definitions shall apply:

- (a) Harvest year- means the calendar year in which the harvest begins;
- (b) Utilised agricultural area - means the total area taken up by arable land, permanent grassland, permanent crops and kitchen gardens used by the holdings, regardless of the type of tenure or whether it is used as common land;
- (c) Area under cultivation - means the area that corresponds to the total sown area, but after the harvest it excludes ruined areas (e.g. due to natural disasters);
- (d) Cropped area - means the area that corresponds to the total sown area for producing a specific crop during a given year;
- (e) Harvested area - means the part of the cropped area that is harvested. It can, therefore, be equal to or less than the cropped area;
- (f) 'Production area -, in connection with permanent crops, means the area that can potentially be harvested in the reference harvest year. It excludes all non-producing areas, such as new plantations that have not yet started to produce;
- (g) Harvested production - means production including on-holding losses and wastage, quantities consumed directly on the farm and marketed quantities, indicated in units of basic product weight;
- (h) Yield - means the harvested production per area under cultivation;
- (i) Crops under glass or high (accessible) cover - means crops which, for the whole of their period of growth or for the predominant part of it, are covered by greenhouses or fixed or mobile high cover (glass or rigid or flexible plastic). This excludes sheets of plastic laid flat on the ground, as well as land under cloches or tunnels not accessible to man or movable glass-covered frames. Areas of crops which are grown temporarily under glass and temporarily in the open air are reported as entirely under glass, unless the period under glass is of extremely limited duration;
- (j) Main area of a given parcel - means the area where the parcel has been used only once during a given crop year, and which is unequivocally defined by that use.

2. Successive cropping - refers to a parcel of arable land that is used more than once during a given crop year but which each time it is used has only one crop. That area shall be considered as area under cultivation for each crop. The concepts of main and secondary areas are not applicable in this context.

Combined cropping - refers to a combination of crops that are cultivated on a parcel of agricultural land at the same time. The area under cultivation in this case is distributed between the crops in proportion to the area of the land they are cultivated on. The concepts of main and secondary areas are not applicable in this context.

Dual-purpose crops -, i.e. crops having more than one purpose, are by convention considered as crops for their primary use and as secondary crops for their supplementary uses.

### **Sub-Concept 3.5: Statistical unit**

Data are observed for the following units:

- i) Agricultural holding - A single unit, both technically and economically, which has a single management, and which conducts agricultural activity.
- ii) Holdings with livestock - Agricultural holdings with bovine animals, goats, sheep, pig, poultry, rabbits, beehives or livestock N.E.C.

### **Sub-Concept 3.6: Statistical population**

The statistical population consists of administrative sources coming from the civil abattoir, the Malta Dairy Products, the agriculture department and the farmers market that in turn collect data from their respective sources ensuring comprehensive coverage of both livestock and agricultural holders is undertaken.

For the annual pig census, data are collected from all pig farms in Malta and Gozo.

### **Sub-Concept 3.7: Reference area**

Maltese Islands: Malta and Gozo (NUTS level 1,2 and 3).

### **Sub-Concept 3.8: Time coverage**

The time period for livestock statistics goes back to 2002. Meat statistics, milk and milk products are comparable from 1995 onwards, while hatcheries statistics data are available as from 2004.

Crops statistics are comparable from 1997 onwards.

### **Sub-Concept 3.9: Base period**

Year 2010.

## **CONCEPT 4 – UNIT OF MEASURE**

Livestock statistics: Number of heads, weight in kilograms and value in Euro;

Milk and milk products statistics: Quantity in kilograms or gallons and value in Euro;

Eggs for hatching and farmyard poultry chicks' statistics: Number of eggs in thousands;

Crops statistics: Weight in kilograms and value in Euro.

## **CONCEPT 5 – REFERENCE PERIOD**

All data are collected in order to fulfil all our obligations mentioned in Concept 3. For this reason, livestock statistics (pigs, cattle, sheep and goats) are collected on an annual basis with the reference data being the 1<sup>st</sup> December.

Data for meat statistics, milk and milk products, eggs for hatching and crops are collected on a monthly basis.

## **CONCEPT 6 – INSTITUTIONAL MANDATE**

### **Sub-Concept 6.1: Legal acts and other agreements**

The Malta Statistics Authority (MSA) Act empowers the NSO to collect, compile, extract and release official statistics related to demographic, social, environment, economic and general activities and conditions of Malta.

At a European level, the following legal acts apply:

#### Livestock and meat statistics:

- [Regulation \(EC\) No 1165/2008 of the European Parliament and of the Council](#) of 19 November 2008 concerning livestock and meat statistics and repealing Council Directives 93/23/EEC, 93/24/EEC and 93/25/EEC. OJ L 321, 1.12.2008, p. 1-13.
- The latest consolidated version includes the following amendment:  
[Regulation \(EU\) No 1350/2013 of the European Parliament and of the Council](#).

#### Milk and milk product statistics:

- [Council Directive 96/16/EC](#) of 19 March 1996 on statistical surveys of milk and milk products.  
OJ L 78 of 28.3.1996, p. 27-29
- The latest consolidated version includes the following amendments:
  - [Directive No 2003/107/EC](#) of the European Parliament and of the Council;
  - [Regulation \(EC\) No 1882/2003](#) of the European Parliament and of the Council;
  - [Regulation \(EC\) No 219/2009](#) of the European Parliament and of the Council;
  - [Regulation \(EU\) No 1350/2013](#) of the European Parliament and of the Council.

As implemented by:

- [Commission Decision 97/80/EC](#) of 18 December 1996 laying down provisions for the implementation of Council Directive 96/16/EC on statistical surveys of milk and milk products.  
OJ L 24 of 25.1.1997, p. 26-49.
- The latest consolidated version includes the following amendments:
  - [Council Decision 98/582/EC](#);
  - [Commission Decision No 2005/288/EC](#);
  - [Commission Decision 2011/142/EU](#).

#### Statistics on eggs for hatching and farmyard poultry chicks:

- [Regulation \(EC\) No 617/2008](#) of 27 June 2008 laying down detailed rules for implementing Regulation (EC) No 1234/2007 as regards marketing standards for eggs for hatching and farmyard poultry chicks.  
OJ L 168, 28.6.2008, p. 5–16

- The latest consolidated version includes the following amendments:
  - [Commission Regulation \(EU\) No 557/2010](#);
  - [Commission Regulation \(EU\) No 939/2011](#);
  - [Commission Regulation \(EU\) No 519/2013](#);

#### Crops' statistics:

- [Regulation \(EC\) No 543/2009](#) of 18 June 2009 concerning crop statistics and repealing Council Regulations (EEC) No 837/90 and (EEC) No 959/93  
OJ L 167, 29.6.2009, p. 1-11
- The latest consolidated version includes the following amendments:
  - [Regulation \(EU\) No 1350/2013](#) of the European Parliament and of the Council;
  - [Commission Delegated Regulation \(EU\) 2015/1557](#)

### **Sub-Concept 6.2: Data sharing**

Agreements through Memoranda of Understanding between administrative source providers and the NSO are in place to have updated information.

Relevant News Releases are published on the NSO's website. Statistics in line with requirements of legal acts referred to in sub-concept 6.1 are additionally shared with Eurostat.

## **CONCEPT 7 - CONFIDENTIALITY**

### **Sub-Concept 7.1: Confidentiality – Policy**

#### At National level:

The NSO requests information for the compilation of official statistics according to the articles of the MSA Act – Cap. 422 and the Data Protection Act – Cap. 586 of the Laws of Malta implementing the General Data Protection Regulations (GDPR).

Article 40 of the MSA Act stipulates the restrictions on the use of information while Article 41 stipulates the prohibition of disclosure of information. Furthermore, Section IX of the Act (Offences and Penalties) lays down the measures to be taken in case of unlawful exercise of any officer of statistics regarding confidentiality of data.

Since its inception, the NSO has always assured that all data collected remains confidential and that it is used for statistical purposes only according to the articles and derogations stipulated in the laws quoted above. The Office is obliged to protect the identify of data providers and refrain from divulging any data to third parties that might lead to the identification of persons or entities.

During 2009, the NSO has set up a Statistical Disclosure Committee to ensure that statistical confidentiality is observed, especially when requests for microdata are received.

Upon employment, all NSO employees are informed of the rules and duties pertaining to confidential information and its treatment. In line with stipulations of the MSA Act, before commencing work, every employee is required to take an oath of secrecy whose text is included in the same Act.



An internal policy on anonymisation and pseudo-anonymisation is in place to ascertain that adequate methods are used for the protection of data which the office collects and shares with the public in its capacity as the National Statistics Office. The policy is meant to safeguard confidentiality of both personal and business data entrusted to the NSO. The document provides guidance for all NSO employees who process data on a daily basis as to how anonymisation and pseudo-anonymisation methods should be applied. The policy applies to all confidential, restricted and internal information, regardless of form (paper or electronic documents, applications and databases) that is received, processed, stored and disseminated by the NSO.

At European level:

[Regulation \(EC\) No 223/2009](#) on European statistics (recital 24 and Article 20(4) of 11 March 2009 (OJ L 87, p. 164), stipulates the need to establish common principles and guidelines ensuring the confidentiality of data used for the production of European statistics and the access to those confidential data with due account for technical developments and the requirements of users in a democratic society.

### **Sub-Concept 7.2: Confidentiality – Data Treatment**

To ensure statistical confidentiality, only aggregated data are released from the data obtained from the administrative sources and from the annual pig census. Identification problems arise when compiling specific data from only one entity. The latter has, however, formally approved the publication of the relevant data by NSO.

## **CONCEPT 8 – RELEASE POLICY**

### **Sub-Concept 8.1: Release Calendar**

An advance release calendar is maintained by the NSO and published on the NSO website. The calendar projects three months of news releases (including the current and two subsequent months).

### **Sub-Concept 8.2: Release Calendar access**

[https://nso.gov.mt/en/News\\_Releases/Release\\_Calendar/Pages/News-Release-Calendar.aspx](https://nso.gov.mt/en/News_Releases/Release_Calendar/Pages/News-Release-Calendar.aspx)

### **Sub-Concept 8.3: User access**

An internal policy on dissemination is in place to govern the dissemination of official statistics in an impartial, independent and timely manner, making them available simultaneously to all users. The NSO's primary channel for the dissemination of official statistics is the NSO website. Tailored requests for statistical information may also be submitted through the NSO website.

Moreover, relevant news releases are available in electronic format on the NSO website.

## **CONCEPT 9 – FREQUENCY OF DISSEMINATION**

Not applicable.

## **CONCEPT 10 – ACCESSIBILITY AND CLARITY**

### **Sub-Concept 10.1: News release**

Relevant News Releases are available on the [NSO website](#).

### **Sub-Concept 10.2: Publications**

Selected indicators are published in the bi-annual publication on [Regional Statistics](#).  
A set of selected indicators is also published on the NSO website through:  
[https://nso.gov.mt/Home/SELECTED\\_INDICATORS/Pages/Sub-Selected-Indicators/Agriculture.aspx](https://nso.gov.mt/Home/SELECTED_INDICATORS/Pages/Sub-Selected-Indicators/Agriculture.aspx)

### **Sub-Concept 10.3: Online Database**

Monthly data on meat and crops statistics are uploaded on a quarterly basis on the [Stat DB](#); the NSO's online Statistical Database.

### **Sub-Concept 10.4: Micro-data access**

Data dissemination is presented in aggregate form in almost all cases. Due to confidentiality reasons this may not be possible, and data are flagged as confidential.

### **Sub-Concept 10.5: Other**

Not applicable.

### **Sub-Concept 10.6: Documentation on methodology**

Work processes and procedures for the compilation of Agricultural Production Statistics are documented in a standardised reporting template and aligned to the GSBPM model. The model covers all phases of the statistical production process, from the initial stages of identifying what statistics are needed and the scope of the particular survey, to the final stages of dissemination and evaluation. GSBPM is only available internally and may be accessed by all NSO employees.

Methodological notes are provided in a dedicated section at the end of the respective news releases.

#### **Sub-Concept 10.6.1: Metadata completeness rate**

Information about all required metadata concepts (and sub-concepts thereof) are provided.

### **Sub-Concept 10.7: Quality Documentation**

The procedures used for the analysis of data are documented in line with the GSBPM model and made available to NSO staff members only.

Agricultural Production Statistics SIMS reports are available to the public on the [NSO's metadata website including concepts related to metadata and quality](#).

A quality report on animal and crop statistics is submitted to Eurostat every three years.

The NSO has developed an internal Quality Management Framework (QMF) which is built on common requirements of the ESS Code of Practice (ESS CoP). A document was prepared to include a set of general quality guidelines spanning over all statistical domains. Assuring methodological soundness is an integral part of the QMF, nonetheless, the document spans also on other areas related to institutional aspects.

## **CONCEPT 11 – QUALITY MANAGEMENT**

### **Sub-Concept 11.1: Quality Assurance**

Every effort is made to minimise errors. Quality is ensured by adherence to methodological guidelines. Collected data for the reference year is inputted manually by a statistician/senior statistician and cross checking is carried out by various other statisticians. Data are also compared with the previous or corresponding months (depending on the data). If discrepancies are noticed, the respective administrative source is contacted again to update or verify the figures given. These measures ensure that the overall accuracy of the Agricultural Production statistics is of a high level.

The NSO has developed an internal Quality Management Framework (QMF) which is built on common requirements of the ESS Code of Practice (ESS CoP). A document was prepared to include a set of general quality guidelines spanning over all statistical domains. Assuring methodological soundness is an integral part of the QMF, nonetheless, the document spans also on other areas related to institutional aspects.

Every five to seven years, the NSO participates in a Peer Review exercise through which the compliance of its operations with principles of the ESS CoP is assessed by an expert team. Peer Reviews are indeed part of the European Statistical System (ESS) strategy to implement the ESS CoP. Each NSI is expected to provide information as requested by a standard self-assessment questionnaire. Following this an expert team visits the office to meet NSI representatives and main stakeholders. Peer Reviews result in a compliance report and the listing of a set of Improvement Actions which need to be followed up by the NSI. The next round of Peer Reviews is planned to be carried out in 2022.

### **Sub-Concept 11.2: Quality Assessment**

Quality assessments are ongoing to safeguard compliance with the [European statistics code of practice](#). Every effort is made to minimise the occurrence of errors.

## **CONCEPT 12 - RELEVANCE**

### **Sub-Concept 12.1: User needs**

The main users of the statistical data of agricultural production are Eurostat and the Food and Agriculture Organisation of the United Nations.

Other users include the National Accounts and Short-term Statistics Units within the NSO.

### **Sub-Concept 12.2: User satisfaction**

The last User Satisfaction Survey was held in 2014 with the aim to collect information about key users' satisfaction with statistical output.

The NSO keeps record of the number of News Releases and publications disseminated on its website; the users to whom statistical products are provided; as well as the number of requests that are processed every year.

### **Sub-Concept 12.3: Data Completeness**

The data completeness rate stands at 100%. All data required by the regulations mentioned in Concept 3 are fully collected.

## **CONCEPT 13 – ACCURACY AND RELIABILITY**

### **Sub-Concept 13.1: Overall accuracy**

Collected data for the reference year is inputted manually by a statistician/senior statistician and cross checking is carried out by various other statisticians. Data are also compared with the previous or corresponding months (depending on the data). If discrepancies are noticed, the respective administrative source is contacted again to update or verify the figures given. These measures ensure that the overall accuracy of the Agricultural Production statistics is of a high level.

### **Sub-Concept 13.2: Sampling errors**

Not applicable, since administrative data are used in most of the cases. For the annual pig population, a census is carried out.

### **Sub-Concept 13.3: Non-sampling error**

Potential sources of non-sampling error relate to measurement and processing errors. Every effort is made to minimise any measurement errors by having in-place checks across time as well as various re-checks and automatic validations and processing.

Throughout the processing phase of the annual cattle and sheep and goat's data, formulae are used to make sure that the correct amounts of livestock by type are calculated correctly.

Regarding the other administrative data and the data collected from the pig farms, processing errors are kept to a minimal level by applying several validation rules as soon as the data are provided.

### **Sub-Concept 13.3.1: Coverage error**

Not applicable. For the pig census, the details of the operational farms are obtained directly from the civil abattoir which is obliged to keep an updated list. The details are used to send the questionnaires to the correct addresses. All the operational farms are contacted.

For the other administrative sources, all the eligible farmers/breeders are included in the data obtained.

#### **Sub-Concept 13.3.1.1: Over Coverage**

Not applicable.

#### **Sub-Concept 13.3.1.2: Common Units Proportion**

Not applicable.

#### **Sub-Concept 13.3.2: Measurement error**

Every effort is made to minimise any measurement errors by having in-place checks across time as well as various re-checks and automatic validations and processing.

#### **Sub-Concept 13.3.3: Non-response error**

Not applicable since all the required variables are collected from the administrative sources or from data providers (in the case of the annual pig census).

#### **Sub-Concept 13.3.3.1: Unit non-response**

Not applicable, as most of the data are obtained through administrative sources.

In the case of the annual pig stock, where a census is undertaken, 100% response is achieved.

#### **Sub-Concept 13.3.3.2: Item non-response**

Not applicable since all the required variables are collected from the administrative sources or from data providers (in the case of the annual pig census).

#### **Sub-Concept 13.3.4: Processing error**

Throughout the processing phase of the annual cattle and sheep and goat's data, formulae are used to make sure that the correct amounts of livestock by type are calculated correctly.

Regarding the other administrative data and the data collected from the pig farms, processing errors are kept to a minimal level by applying several validation rules as soon as the data are provided.

#### **Sub-Concept 13.3.5: Model assumption error**

Not applicable.

### **CONCEPT 14 – TIMELINESS AND PUNCTUALITY**

#### **Sub-Concept 14.1: Timeliness**

Agricultural Production data were published as follows:

- Cattle census data as at 1<sup>st</sup> December 2014 – published on 16<sup>th</sup> January 2015

- Pig census data as at 1<sup>st</sup> December 2014 – published on 6<sup>th</sup> April 2015
- Sheep and Goats census data as at 1<sup>st</sup> December 2014 – published on 4<sup>th</sup> February 2015
- Fruit and Vegetables data for July-December 2016 – published on 6<sup>th</sup> February 2017
- Meat production data for July-December 2016 – published on 20<sup>th</sup> February 2017
- Milk and Eggs Statistics Annual data for 2014 – published in the annual publication on 18<sup>th</sup> January 2016.

#### **Sub-Concept 14.2: Punctuality**

Relevant data are disseminated on time in line with the stipulated time frames.

### **CONCEPT 15 – COHERENCE AND COMPARABILITY**

#### **Sub-Concept 15.1: Comparability – Geographical**

The statistical data collected can be compared with the data of other European countries. No issues are found when comparing statistics between regions in Malta. No comparability issues occur as all countries follow the established guidelines of the stipulated regulations mentioned in Concept 3.

#### **Sub-Concept 15.2: Comparability – Over Time**

There have been no significant annual methodological changes in the data collected, hence there were no breaks in series.

- Livestock statistics are comparable from 2002 onwards.
- Meat statistics, milk and milk products are comparable from 1995 onwards.
- Hatcheries statistics are comparable from 2004 onwards.
- Crops statistics are comparable from 1997 onwards.

#### **Sub-Concept 15.3: Coherence – Cross Domain**

Not applicable.

#### **Sub-Concept 15.3.1: Coherence – Sub-Annual and Annual statistics**

In the absence of significant annual methodological changes, data regarding agricultural production are coherent.

#### **Sub-Concept 15.3.2: Coherence – National Accounts**

Statistical data which are relevant for the National Accounts unit are sent following the necessary checking, this ensures total reconciliation of data.

#### **Sub-Concept 15.4: Coherence – Internal**

The National Accounts and Short-Term Statistics units within the NSO make use of the data collected by the Agriculture unit. This ensures internal consistency with various data sets.

#### **CONCEPT 16 – COST AND BURDEN**

Data collection, data inputting and analysis are carried out by one statistician. Data collection costs are negligible as this is done via email. The annual pig census is conducted through a postal survey and the costs involved are kept to a minimum.

Respondent burden is not an issue for the data collection of most of the agricultural production statistics as data are collected through administrative sources.

In the case of the pig census, the burden on the farmers is minimal as the questionnaire is rather straight forward and questions remain the same from one year to the next. Moreover, should any farmers find any difficulty to fill in the questionnaire, guidance is provided by the staff at the Agriculture unit.

#### **CONCEPT 17 – DATA REVISION**

##### **Sub-Concept 17.1: Data revision – Policy**

Revision of data is compliant with the ESS Code of Practice principles.

At the NSO, there is currently no internal policy governing revisions that occur for all statistics produced. Nonetheless, a revisions policy is being drafted to safeguard a coordinated revisions system across statistical domains.

This policy will take account of the need and causes for revisions; time and frequency of revisions; data and other statistical products affected by such revisions; and length of periods revised.

##### **Sub-Concept 17.2: Data revision – Practice and Data Revision**

Not applicable.

#### **CONCEPT 18 – STATISTICAL PROCESSING**

##### **Sub-Concept 18.1: Source data**

###### Livestock statistics:

Information on the cattle, sheep and goats survey is compiled entirely from the information of the Bovine Register, which is under the control of the Veterinary Regulatory Directorate at the Civil Abattoir. For pigs, an annual questionnaire is sent directly to the breeders.

###### Meat statistics:

Data with respect to cattle and pig slaughtering are provided by the civil abattoir under the responsibility of the Ministry for Sustainable Development, the Environment and Climate Change. Data on broiler slaughtering are provided directly by private licensed slaughterhouses.

Milk and milk products:

Information on milk is obtained directly from the dairy plant.

Hatcheries:

Data on hatcheries are collected from the Veterinary and Phytosanitary Regulation Department.

Crops:

The information is collected from the two official farmers' markets (Pitkali Malta, Co-op Malta) where all farmers deposit their produce for sale to licensed hawkers, through private middlemen. The information is compiled on a daily basis, with Monday and Thursday being the busiest days.

**Sub-Concept 18.2: Frequency of data collection**

Information regarding livestock statistics which incorporate data on the pigs, cattle, sheep and goats is collected on an annual basis with the reference date being 1st December.

Data for meat statistics, milk and milk products, eggs for hatching and crops are collected on a monthly basis.

**Sub-Concept 18.3: Data Collection**

Most of the data on agricultural production are forwarded to the NSO by email and are compiled from administrative sources.

Regarding the annual pig survey, a postal survey is undertaken. Non-respondents are contacted by telephone and efforts are in place to contact every farm on the register.

**Sub-Concept 18.4: Data Validation**

When data are received and inputted in the respective file, data are checked against the previous month and/or the respective quarter. Various links have been included in different worksheets in order to minimize data inputting errors.

If notable discrepancies are evident in the number of animals slaughtered and the respective carcass weight, the quantity and value of fruit and vegetables that passed through the official markets, the administrative source is queried. Data are either confirmed or updated because of an error. A written explanation would be given by the source if data are updated.

**Sub-Concept 18.5: Data Compilation**

Livestock statistics:

By using the annual data obtained from the bovine register, detailed information on the type of cattle, sheep and goats at district level are derived. The same applies for the data collected through the annual pig census.

Meat statistics:



By using the monthly data obtained from the civil abattoir and the private slaughterhouses for poultry, the average carcass weight and price for the different species are compiled. Besides, annual totals are also calculated.

Milk and milk products:

By using the monthly data collected from the dairy plant, the quarterly average price paid to the breeder is calculated. Besides, the annual amount of milk that passes through the dairy plant is also calculated.

Crops:

The monthly information collected from the administrative sources is aggregated according to Maltese and Gozitan farmers and the type of fruit and vegetables. Annual totals are also compiled accordingly.

**Sub-Concept 18.5.1: Imputation**

Imputation is hardly ever undertaken. However, when this occurs, imputed data are derived from the previous data available.

**Sub-Concept 18.6: Adjustment**

Not applicable.

**Sub-Concept 18.6.1: Seasonal Adjustment**

Not applicable.

**CONCEPT 19 - COMMENT**

No further comments.