

CAP CONTEXT INDICATORS 2014-2020

ANNEXES

2016 update

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ANNEX A- Statistical description

Statistical description

The monitoring and evaluation framework of the CAP 2014 – 2020 defines a set of 45 socioeconomic, sectorial and environmental indicators that reflect relevant aspects of the general contextual trends that are likely to have an influence on the implementation, achievements and performance of the CAP: *context indicators*.

The list of the context indicators is referred to in *COMMISSION IMPLEMENTING REGULATION (EU)* No 834/2014 of 22 July 2014 laying down rules for the application of the common monitoring and evaluation framework of the common agricultural policy and specified in *COMMISSION IMPLEMENTING REGULATION (EU)* No 808/2014 of 17 July 2014 laying down rules for the application of Regulation (EU) No 1305/2013 of the European Parliament and of the Council on support for rural development by the European Agricultural Fund for Rural Development (EAFRD). A detailed description and the methodology for their calculation is provided in the Technical Handbook on the Monitoring and Evaluation Framework of the Common Agricultural Policy 2014 – 2020¹.

Indicator factsheets containing a description of definitions, methodology and data sources can be found under the following link: <u>http://ec.europa.eu/agriculture/cap-indicators/context/2015/2015-10-01-context-indicators_en.pdf</u>

An analysis of the most recent data, together with tables, maps and graphs, is provided here for each group of indicators:

- Socio-economic indicators,
- Sectorial indicators,
- Environmental indicators.

In particular, for each single indicator the following documents are presented:

- a pdf-document, providing a description of the statistical information as well as tables, where regional data are available, and maps
- an Excel table with statistical data and
- individual maps.

A full database with data for all 45 indicators is also provided.

For some indicators, data are presented at regional level at the most detailed geographic level possible (NUTS 2 or 3), whereas for others only data at national level are available.

Some socio-economic indicators (e.g. C.01 Population, C.08 GDP per capita, etc.) include a presentation of results at regional level, classified according to the rural-urban typology (Predominantly Rural (PR) / Intermediate Regions (IR) / Predominantly Urban (PU)), as agreed by the Commission in 2010, as well as the national value².

¹ The *Technical Handbook on the Monitoring and Evaluation Framework of the Common Agricultural Policy 2014 – 2020* will be published on the Europa Website during the course of 2016.

² For more information about this typology see: <u>http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Urban-</u><u>rural_typology</u>

For other indicators, such as those based on the Labour Force Survey, information is only available at NUTS 2 level using a different classification, called "degree of urbanisation" (DEGURBA), which makes a distinction between thinly-populated areas (i.e. "rural"), intermediate urbanised areas and densely-populated areas (i.e. "urban"). In case of context indicator C.30 Tourism infrastructure, data are classified also according to the DEGURBA, but with the following alternative designations:

- 1. **Cities** (alternate name: densely populated areas): At least 50% of the population lives in urban centres.
- 2. **Towns and suburbs** (alternate name: intermediate density areas): At least 50% of the population lives in urban clusters and Less than 50% of the population lives in urban centres.
- 3. **Rural areas** (alternate name: thinly populated areas): At least 50% of the population lives in rural grid cells.

Where possible and relevant, time series have been elaborated. Depending on the indicator, a simple growth or an annual average growth rate have been calculated. The simple growth is calculated as: value in year t+n – value in year t. The average annual growth rate measures the compound annual average increase or reduction, as a percentage, of the variable concerned from a base year (t in the following equation). It is calculated as:

100 x Anti-Log [Log ((Statistic for year t+n) / (Statistic for year t)) / n] – 100

Time series containing economic data in euros are calculated at constant prices (where possible), whereas data for the latest available year are presented at current prices. As values at constant prices are not available at regional level, they have been estimated by using national price indices of the corresponding aggregate.

Additional caveats concerning the presentation of the data

The indicators aim to provide as much information as possible to give a broad overview of the agrifood sector, of the situation of the environment and of rural areas. Some difficult choices have been made in this context that the reader should be aware of:

- The tables provide information for the most recent year for which data were available for most of the Member States. This is not the same year for all indicators, or even for all Member States within one indicator. In some cases, data for one indicator are provided for a different year for some Member States or regions.
- For some indicators, information comes from different sources at national and at regional level. Very often the updates or revisions/corrections of the data are not made at the same time in the national and in the regional series. This may explain why occasionally the sum of the regions does not correspond to the national figure. Indeed, when different sources are used, the national results provided in the tables are based on the series at national level (rather than on the sum of the regional data from regional statistics).
- In some cases, data are not available for some regions of a Member State. Nonetheless, when the effect was considered to be limited, tables are provided according to the rural character of regions based on the available data.
- Most of the information presented can be found in existing databases and reports, such as Eurostat databases, the European Environmental Agency database and other reports of DG Agriculture and Rural Development. These remain the reference sources for the relevant data.

Data issues

The information used to calculate the indicators is based on data stemming from different sources and documents, both inside and outside the European Commission. The data have been processed according to the requirements of the different indicators and are presented together here.

Two important data issues need to be mentioned:

- 1. Weaknesses concerning data availability,
- 2. Limitations to the classification of data by type of region.

1. Limited data availability

Statistical databases don't always contain the exact information needed for indicators that have been formulated based on policy needs. The main problems relate to the following:

Insufficient geographical detail

The CAP should be analysed at a sufficiently detailed geographical level in order to describe different situations and to assess overall trends across the EU. This is obvious for environmental aspects, but it is also necessary for indicators describing the socio-economic situation in rural areas.

The provision of time series at detailed geographical levels is hindered by the fact that the delineation of many geographical units has evolved over time (e.g. some regions were merged or split, or their boundaries were modified in 2006, and again in 2010).

Moreover, some indicators mainly related to environmental aspects can only be analysed at Member State level (NUTS 0), given the lack of statistical information to describe the current environmental situation at a lower geographical level (NUTS 2 or 3). This applies also to some structural indicators such as C.14 Labour productivity in agriculture, C.15 Labour productivity in forestry and C.16 Labour productivity in the food industry.

Time lag / infrequent updates

Some data are only collected at long intervals. Together with the time needed to validate and publish the data, this can lead to time lags of 5 years and more between the latest round of data collection and the reporting of the indicator.

Incomplete data series / data gaps

Data are not always available for all countries or regions for all years. In such cases, data are only reported for those countries for which they are available (see e.g. C.15 Labour productivity in forestry)

Break in series / methodological changes

As mentioned above, changes in data collection methods or definitions can be problematic when reporting time series.

2. Definition of rural areas

Although "rural" areas have been analysed in many countries for decades, there is no single internationally accepted definition of rural as a concept. The main reasons are as follows:

- (1) The various perceptions of what is (and what is not) rural and of the elements characterizing "rurality" (natural, economic, cultural, etc.);
- (2) The inherent need to have a tailor-made definition according to the "object" analysed or the policy concerned;
- (3) The difficulty to collect relevant data at the level of basic geographical units (administrative unit, grid cell, plot, etc.).

For statistical reporting, whatever the methodology adopted, the determining factor is the availability of statistics for the selected regional units. For the EU, it implies that the methodology must be able to define the rural character of NUTS regions, as most socio-economic data are usually only available at this level.

In 2010, the European Commission agreed on a new typology of predominantly rural, intermediate and predominantly urban regions, based on a variation of the previously used OECD methodology. The aim of this new typology is to provide a consistent basis for the description of predominantly rural, intermediate and predominantly urban regions in all Commission communications, reports and publications. This new typology is used in this report to the extent possible.

For some indicators, such as the ones related to employment and unemployment from the Labour Force Survey, data are available at NUTS 2 level, whereas the classification of rural areas is defined at the level of NUTS 3. Increasingly, Member States send aggregated data by type of region to Eurostat, where they are published under a category called 'Rural development statistics'³.

³ <u>http://epp.eurostat.ec.europa.eu/portal/page/portal/rural_development/introduction</u>

Annex B - Main data sources

Agri-Environmental Indicators (AEIs)

Agri-environmental indicators (AEIs) track the integration of environmental concerns into the Common Agricultural Policy (CAP) at EU, national and regional levels.

In its Communication COM(2006)508 final in 2006, the European Commission adopted 28 AEIs to assess the interaction between the CAP and the environment. These AEIs, listed in the analytical framework, track:

- Farm management practices
- Agricultural production systems
- Pressures and risks to the environment
- The state of natural resources

Fact sheets for each of the 28 AEIs listed in COM(2006)508 final have been prepared by various Commission services. They outline the methodology used to calculate the indicator, data sources and availability, as well as the most recent findings.

Website:

http://ec.europa.eu/eurostat/statistics-explained/index.php/Agri-environmental_indicators

CORINE Land Cover

The Corine Land Cover project was adopted by the European Commission in 1985 (Directorate General "Environment") then managed by the European Topic Centre of the European Environment Agency in 1993.

The aim of Corine Land Cover is to provide information on land cover and on the state of the environment in the European Union. Corine Land Cover is a cartographic tool which covers every national territory where the survey is undertaken.

CORINE Land Cover databases are obtained through computer assisted interpretation of satellite images acquired in 1990, 2000, 2006 and 2012, offering the possibility to describe the geographic distribution of specific land cover changes in a geo-referenced approach.

CORINE land cover (CLC) describes land cover (and partly land use) with a three-level nomenclature of 44 classes. CLC was elaborated based on the visual interpretation of high resolution satellite imagery (Spot, Landsat TM and MSS). Ancillary data (aerial photographs, topographic or vegetation maps, statistics, local knowledge) is used to refine interpretation and assign classes. The CLC database is based on a standard production methodology characterised by the following elements: Mapping scale is 1:100 000. Mapping accuracy is 100 m. The minimum mapping unit for the inventory is 25 ha for areas, and 100 m for linear elements.

Website: <u>http://land.copernicus.eu/pan-european/corine-land-cover/view</u>

Economic Accounts for Agriculture (EAA)

The economic accounts for agriculture, abbreviated as EAA, are satellite accounts of the European system of national and regional accounts, adapted to the specific nature of the agricultural sector, providing complementary information and concepts. Although the structure of the EAA matches very closely that of the national accounts, their compilation requires the formulation of appropriate rules and methods.

The EAA analyse the production processes of the agricultural sector and the primary income generated by these activities. The accounts are therefore based on the industry concept. The agricultural sector, as described in the EAA, corresponds to Division 01 ("Crop and animal production, hunting and related service activities") in NACE Rev. 2 section A ("Agriculture, forestry hunting and fishing").

The EAA measure the total output of the agricultural activity which includes:

- output sold (including trade in agricultural goods and services between agricultural units);
- changes in stocks;
- output for own final consumption and own-account gross-fixed capital formation;

- output produced for further processing by other agricultural producers;
- intra-unit consumption of livestock feed products.

The agricultural industry's output equals the sum of the output of agricultural products plus goods and services produced in non-agricultural secondary activities.

National statistical institutes or ministries of agriculture are responsible for data collection and calculation of national EAA, in accordance with EU Regulations. Eurostat is responsible for the production of aggregated data for the European Union (EU).

Website:

<u>http://ec.europa.eu/eurostat/statistics-</u> explained/index.php/Glossary:Economic accounts for agriculture (EAA)

Farm Structure Survey (FSS)

The purpose of the European Union survey on the structure of agricultural holdings, also referred to as farm structure survey (FSS), is to obtain reliable data, at regular intervals, on the structure of agricultural holdings in the European Union, in particular on land use, livestock and labour force. It was first conducted in 1966-67. An FSS is carried out at intervals of 3 to 4 years. Approximately every ten years, the FSS is conducted in the form of an agricultural census, providing statistically representative results at more detailed geographical levels than the interim surveys. Member States transmit individual (micro) data to Eurostat, where they are stored in a database (Eurofarm).

The results are published 2 to 3 years after the reference year of the survey. The basic unit underlying the FSS is the agricultural holding: a technical-economic unit, under single management, engaged in agricultural production. The FSS covers all agricultural holdings with a utilised agricultural area of at least one hectare (ha) and also those holdings with a UAA of less than 1 ha where their market production exceeds certain natural thresholds. The legal basis for the FSS is Regulation (EC) No 1166/2008 of 19 November 2008 on farm structure surveys and the survey on agricultural production methods, which repealed Council Regulation 571/88/EC. It should be noted that some methodological and legislative changes occurred between the 2007 and 2009 or 2010 surveys.

Website:

<u>http://ec.europa.eu/eurostat/statistics-</u> explained/index.php/Glossary:Farm_structure_survey_(FSS)

FOREST EUROPE & SoEF

Forest Europe (The Ministerial Conference on the Protection of Forests in Europe) is the pan-European policy process for the sustainable management of the continent's forests. Forest Europe develops common strategies for its 46 member countries and the European Union on how to protect and sustainably manage forests. Forest Europe together with the United Nations Economic Commission for Europe (UNECE) and the Food and Agriculture Organization of the United Nations (FAO) have developed so far four editions of the comprehensive report (State of Europe's Forests 2003, 2007, 2011 and 2015) about the state of sustainable forest management in Europe. The last report State of Europe's Forest (SoEF), 2015 provides a comprehensive, up-to-date description of the status and trends of forests and forest management in Europe. The report aims to stimulate sound policy decisions on forests and forest-related issues in Europe by providing objective and harmonized data for FOREST EUROPE's Signatories.

Website: http://www.foresteurope.org/state-europes-forests-2015-report

(Global) Forest Resources Assessment (G-FRA)

The Global Forest Resources Assessment 2010 (FRA 2015) is the most comprehensive assessment of forests and forestry to date. It examines the current status and recent trends for about 90 variables covering the extent, condition, uses and values of forests and other wooded land, with the aim of assessing all benefits from forest resources. Information has been collated from 233 countries and territories for 5 points in time: 1990, 2000, 2005, 2010 and 2015.

FAO's Global Forest Resources Assessment (FRA) is carried out at five-year intervals, the latest one is foreseen in 2015. Organized according to the seven thematic elements of sustainable forest management, the final report of FRA 2015 contains information to monitor progress towards international goals and targets – among others the Millennium Development Goals, the 2010

Biodiversity Target of the Convention on Biological Diversity and the four Global Objectives on Forests of the Non-Legally Binding Instrument on All Types of Forests adopted by the United Nations General Assembly in January 2008. FRA 2015 also includes information on variables such as forest health, the contribution of forests to national economies and the legal and institutional framework governing the management and use of the world's forests. Documentation for FRA 2015 includes 233 country reports.

Website: http://www.fao.org/forest-resources-assessment/en/

Labour Force Survey (LFS)

The Labour Force Survey (LFS) is a quarterly sample survey of households living at private addresses, providing data on labour participation of people aged 15 and over and on persons outside the labour force. Its purpose is to provide information on the labour market that can then be used to develop, manage, evaluate and report on labour market policies.

The survey seeks information on respondents' personal circumstances and their labour market status during a specific reference period, normally a period of one week or four weeks (depending on the topic) immediately prior to the interview. The data can be broken down according to multiple dimensions including age, sex, educational level, economic activity and occupation where applicable.

The LFS is carried out under a European Union Directive and uses internationally agreed concepts and definitions. It is the source of the internationally comparable (International Labour Organisation) measure known as 'ILO unemployment'. Data can be found on the Eurostat website.

Website: <u>http://ec.europa.eu/eurostat/statistics-</u> explained/index.php/EU labour force survey %E2%80%93 data and publication

European System of Accounts (ESA 2010)

The European System of National and Regional Accounts (ESA 2010) is the newest internationally compatible EU accounting framework for a systematic and detailed description of an economy. It is implemented as from September 2014. From that date onwards the data transmission from Member States to Eurostat is following ESA 2010 rules. The ESA 2010 was published in the Official Journal as Annex A of Regulation (EU) No 549/2013. This regulation comprises binding methodological rules to secure comparability of national accounts aggregates, and a compulsory data transmission programme.

ESA 2010 is broadly consistent with the System of National Accounts of the United Nations (2008 SNA) with regard to definitions, accounting rules and classifications

Please note, that for comparability reasons at the time being ESA2010 runs parallel to the old ES95 database on the EUROSTAT website.

Website: <u>http://ec.europa.eu/eurostat/web/esa-2010</u>

Annual national accounts

National accounts are a coherent and consistent set of macroeconomic indicators, which provide an overall picture of the economic situation and are widely used for economic analysis and forecasting, policy design and policy making. Eurostat publishes annual and quarterly national accounts, annual and quarterly sector accounts.

Annual national accounts are compiled in accordance with the European System of Accounts - $\underline{\text{ESA}}$ 2010 as defined in Annex B of the Council Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013.

The previous European System of Accounts, ESA95, was reviewed to bring national accounts in the European Union, in line with new economic environment, advances in methodological research and needs of users and the updated national accounts framework at the international level, the <u>SNA</u> 2008.

The revisions are reflected in an updated Regulation of the European Parliament and of the Council on the European system of national and regional accounts in the European Union of 2010 ($\underline{\text{ESA}}$ 2010). From September 2014 the data transmission from Member States to Eurostat follows ESA 2010 rules. ESA2010 uses aggregation levels of the NACE Rev.2 classification to define industry breakdowns.

Data are provided by the National Statistical Institutes' Accounts Departments. Data come from many sources, including administrative data from government, censuses, and surveys of

businesses and households. Sources vary from country to country and may cover a large set of economic, social, financial and environmental items, which need not always be strictly related to National Accounts. In any case, there is no one single survey source for National Accounts.

The periods referred to are years.

Data are disseminated simultaneously to all interested parties through a database update and on Eurostat website (see "Dissemination formats" below for more details).

National data are published by the National Statistical Institutes (NSI) following national dissemination calendars.

In case of indicators on labour productivity, this publication uses the National Accounts aggregates by industry based on ESA2010 NACE A*64 classification.

ANNEX C – Glossary of terms & definitions⁴

Agricultural training of farm managers

According to COMMISSION REGULATION (EC) No 1200/2009 of 30 November 2009 implementing Regulation (EC) No 1166/2008 of the European Parliament and of the Council on farm structure surveys and the survey on agricultural production methods, as regards livestock unit coefficients and definitions of the characteristics, , the manager's agricultural training is defined as follows:

- only practical experience: experience acquired through practical work on an agricultural holding;
- basic agricultural training: any training courses completed at a general agricultural college and/or an institution specializing in certain subjects (including horticulture, viticulture, sylviculture, pisciculture, veterinary science, agricultural technology and associated subjects); a completed agricultural apprenticeship is regarded as basic training;
- full agricultural training: any training course continuing for the equivalent of at least two years full-time training after the end of compulsory education and completed at an agricultural college, university or other institute of higher education in agriculture, horticulture, viticulture, sylviculture, pisciculture, veterinary science, agricultural technology and associated subjects.

These levels of training of farm managers are used in the Farm Structure Survey. In the case of Italy, the definition of "Agricultural training of farm managers" does not correspond to the description provided above.

Annual Work Unit (AWU)

One annual work unit, abbreviated as AWU, corresponds to the work performed by one person who is occupied on an agricultural holding on a full-time basis. Full-time means the minimum hours required by the relevant national provisions governing contracts of employment. If the national provisions do not indicate the number of hours, then 1 800 hours are taken to be the minimum annual working hours: equivalent to 225 working days of eight hours each. As the volume of agricultural labour is calculated on the basis of fulltime equivalent jobs, nobody can represent more than one AWU, even if someone works on agricultural activities for more than the maximum number of hours defining full-time work in that Member State.

Areas facing natural and other specific constraints (ANCs)

According to Article 32 of Council Regulation (EU) No 1305/2013⁵, "Designation of areas facing natural and other specific constraints" (ANCs, in the past referred to as "Less-Favoured Areas" (LFAs)), Member States shall, on the basis of paragraphs 2, 3 and 4, designate areas eligible for payments provided for in Article 31 under the following categories:

- (a) mountain areas;
- (b) areas, other than mountain areas, facing significant natural constraints; and
- (c) other areas affected by specific constraints.

In order to be eligible for payments under Article 31, mountain areas shall be characterized by a considerable limitation of the possibilities for using the land and by an appreciable increase in production costs due to:

(a) the existence, because of altitude, of very difficult climatic conditions, the effect of which is to substantially shorten the growing season;

(b) at a lower altitude, the presence over the greater part of the area in question of slopes too steep for the use of machinery or requiring the use of very expensive special equipment, or a combination of these two factors, where the constraints resulting from each taken separately are less acute but the combination of the two gives rise to an equivalent constraints.

⁴ See also the statistical glossaries available on the Eurostat website: <u>http://ec.europa.eu/eurostat/statistics-</u> <u>explained/index.php/Category:Glossary</u>

⁵ Council Regulation (EU) No 1305/2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) repeals Council Regulation (EC) No 1698/2005.

Areas north of the 62nd parallel and certain adjacent areas shall be considered to be mountain areas.

In order to be eligible for payments under Article 31, areas, other than mountain areas, shall be considered to be facing significant natural constraints if, at least 60 % of the agricultural area meets at least one of the criteria listed in Annex III at the threshold value indicated.

Compliance with those conditions shall be ensured at the level of local administrative units ("LAU 2" level) or at the level of a clearly delineated local unit which covers a single clear contiguous geographical area with a definable economic and administrative identity.

When delimiting the areas concerned by this paragraph, Member States shall carry out a finetuning exercise, based on objective criteria, with the purpose of excluding areas in which significant natural constraints, referred to in the first subparagraph have been documented but have been overcome by investments or by, economic activity, or by evidence of normal land productivity, or in which production methods or farming systems have offset the income loss or added costs referred to in Article 31(1).

Areas other than those referred to in paragraphs 2 and 3 shall be eligible for payments under Article 31 if they are affected by specific constraints and if it is necessary for land management to be continued in order to conserve or improve the environment, to maintain the countryside, to preserve the tourist potential of the area or to protect the coastline.

Areas affected by specific constraints shall comprise farming areas within which the natural production conditions are similar and the total extent of which does not exceed 10 % of the area of the Member State concerned.

In addition, areas may also be eligible for payments under this paragraph, where:

-at least 60 % of the agricultural area meets at least two of the criteria listed in Annex III each within a margin of not more than 20 % of the threshold value indicated, or

-at least 60 % of the agricultural area is composed of areas meeting at least one of the criteria listed in Annex III at the threshold value indicated, and areas meeting at least two of the criteria listed in Annex III each within a margin of not more than 20 % of the threshold value indicated.

Compliance with those conditions shall be ensured at LAU2 level or at the level of a clearly delineated local unit which covers a single clear contiguous geographical area with a definable economic and administrative identity. When delimiting areas concerned by this subparagraph, Member States shall undertake a fine-tuning exercise as described in Article 32(3). Areas considered eligible pursuant to this subparagraph, shall be taken into account for calculating the 10 % limit referred to in the second subparagraph.

By way of derogation, the first sub-paragraph shall not apply to Member States the entire territory of which was considered as an area facing specific handicaps under Regulations (EC) No 1698/2005 and (EC) No 1257/1999.

Member States shall attach to their rural development programmes:

- (a) the existing or amended delimitation pursuant to paragraphs 2 and 4;
- (b) the new delimitation of the areas referred to in paragraph 3.

Common Monitoring and Evaluation Framework (CMEF)

The common monitoring and evaluation framework for the CAP 2014-2020 covers for the first time both pillars of the policy. It has its legal basis in EU regulations at different levels: Article 110 of the "Horizontal Regulation" (Regulation (EU) No 1306/2013) establishes a common monitoring and evaluation framework with a view to measuring the performance of the CAP. It covers all instruments related to the monitoring and evaluation of CAP measures and in particular the direct payments, the market measures and rural development measures. More specifically for Pillar II (rural development) the monitoring and evaluation system is set out by the "Common Provisions Regulation" (Regulation (EU) No 1303/2013) which defines the common monitoring and evaluation elements for the European Structural and Investment Funds (ESI) and the "Rural Development Regulation" (Regulation (EU) No 1305/2013) which addresses the specificities for the rural development programmes.

Generally these regulations should be considered jointly since the respective provisions complement each other. The performance of the CAP measures shall be assessed in relation to the three general objectives of the CAP (i.e. viable food production, sustainable management of natural

resources, climate action and balanced territorial development) and in the case of Pillar II in relation to the thematic objectives for the Europe 2020 strategy for smart, sustainable and inclusive growth.

Ecological Focus Areas (EFA)

Ecological focus areas are established in order to safeguard and improve biodiversity on farms. They consist of areas directly affecting biodiversity such as land lying fallow, landscape features, terraces, buffer strips, afforested areas and agro-forestry areas, or indirectly affecting biodiversity through a reduced use of inputs and better soil structure on farm, such as areas covered by catch crops and winter green cover (see Regulation (EU) No 1307/2013 of the European Parliament and the Council of 17 December 2013 establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy).

Economic Size (of an agricultural holding)

The economic size of farms is one of the criteria utilised to classify agricultural holdings according to the Community typology for agricultural holdings. The latest version of this typology is laid down in COMMISSION DELEGATED REGULATION (EU) No 1198/2014 (for general and principal types of farming) and in COMMISSION IMPLEMENTING REGULATION (EU) 2015/220 (5for particular types of farming specialisations).

The economic size of an agricultural holding is measured as the total Standard Output (SO) of the holding expressed in euro.

European System of Accounts (ESA 95 and ESA 2010)

The European System of National and Regional Accounts (ESA 2010) is the newest internationally compatible EU accounting framework for a systematic and detailed description of an economy. The ESA 2010 was published in the Official Journal on 26 June 2013. It was implemented in September 2014. From that date onwards the data transmission from Member States to Eurostat is following ESA 2010 rules. The impact of the implementation of ESA 2010 on key indicators of the national accounts in Europe differs from country to country. An overview is provided in EURONA 2/2014. Detailed ESA 2010 based annual and quarterly European aggregates and Member State data are available in the Eurostat database. The ESA 2010 differs in scope as well as in concepts from its predecessor ESA 95 reflecting developments in measuring modern economies, advances in methodological research and the needs of users. The structure of the ESA 2010 is consistent with the worldwide guidelines on national accounting set out in the System of National Accounts 2008 (2008 SNA). In order to support the application manuals and handbooks were published by Eurostat. See information in *Annex B* too.

Greenhouse Gases (GHGs)

Greenhouse gases are a group of gases which are believed to contribute to global warming and climate change. There are six greenhouse gases covered by the Kyoto protocol, an environmental agreement adopted by many of the parties to the United Nations Framework Convention on Climate Change in 1997 to curb global warming, the non-fluorinated gases: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and the fluorinated gases: hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6). Converting them to carbon dioxide or CO_2 -equivalents makes it possible to compare them and to determine their individual and total contributions to global warming.

Gross Domestic Product (GDP)

Gross domestic product, abbreviated as GDP, is a basic measure of a country's overall economic health. As an aggregate measure of production, GDP is equal to the sum of the gross value-added of all resident institutional units (i.e. industries) engaged in production, plus any taxes, and minus any subsidies, on products not included in the value of their outputs. GDP is also equal to the sum of the final uses of goods and services (all uses except intermediate consumption) measured in purchasers' prices, minus the value of imports of goods and services, and to the sum of primary incomes distributed by resident producer units.

In fact, GDP can be defined in three ways:

a. Output approach - GDP is the sum of gross value added of the various institutional sectors or the various industries plus taxes and less subsidies on products (which are not allocated to sectors and industries). It is also the balancing item in the total economy production account.

b. Expenditure approach - GDP is the sum of final uses of goods and services by resident institutional units (final consumption expenditure and gross capital formation), plus exports and minus imports of goods and services.

c. Income approach - GDP is the sum of uses in the total economy generation of income account: compensation of employees, taxes on production and imports less subsidies, gross operating surplus and mixed income of the total economy.

The concept is used in the European System of Accounts. GDP at market prices is the final result of the production activity of resident producer units (ESA 1995, 8.89).

Gross Fixed Capital Formation (GFCF)

Gross capital formation consists of gross fixed capital formation, which measures resident producers' acquisitions, less disposals, of fixed assets plus certain additions to the value of non-produced assets, and changes in inventories, which measures the value of the entries into inventories less the value of withdrawals and the value of any recurrent losses of goods held in inventories. Finally, the external balance represents the difference between exports and imports of goods and services.

The concept is used in the European System of Accounts, Gross fixed capital formation (ESA 1995, 3.102) consists of resident's product acquisitions, less disposals, of fixed assets during a given period plus certain additions to the value of non-produced assets realised by the productive activity of producer or institutional units. Fixed assets are tangible or intangible assets produced as outputs from processes of production that are themselves used repeatedly, or continuously, in processes of production for more than one year. Disposals of fixed assets are treated as negative acquisitions.

Gross Value Added (GVA)

Gross Value Added (GVA) (according to ESA 2010) is defined as output value at basic prices less intermediate consumption valued at purchasers' prices. GVA is calculated before consumption of fixed capital.

The producer price is the amount receivable by the producer from the purchaser for a unit of a product minus value added tax (VAT), or similar deductible tax, invoiced to the purchaser.

GVA at basic prices is output at basic prices minus intermediate consumption at purchaser prices. The basic price is the amount receivable by the producer from the purchaser for a unit of a product minus any tax on the product plus any subsidy on the product.

GVA at factor costs is not a concept explicitly used in national accounts. It can be derived by subtracting other taxes on production from GVA at basic prices and adding other subsidies on production.

GVA can be broken down by industry. The sum of GVA at basic prices over all industries plus taxes on products minus subsidies on products gives gross domestic product. Gross value added of the total economy usually accounts for more than 90 % of GDP.

GVA is available in a breakdown by 10 main economic activities according to NACE Rev. 2 (Statistical classification of economic activities in the European Community). NACE A = Agriculture, forestry, fishing. The ESA 2010 (European System of Accounts) regulation may be referred to for more specific explanations on methodology.

Holder (of an agricultural holding)

In Community Farm Structure Surveys, the holder of the farm is the natural person, group of natural persons or the legal person on whose account and in whose name the holding is operated and who is legally and economically responsible for the holding, i.e. who takes the economic risks of the holding. The holder can own the holding outright or rent it or be a hereditary long term leaseholder or a beneficiary or a trustee. All partners on a group holding who take part in the farm work on the holding are considered to be holders. The legal and economic responsibility is defined according to Member States' documented own rules. The holder may have delegated all or part of his/her power of decision of the normal daily financial and production routines of running of the holding to a manager. In the case of share farming the share farmer is shown as holder and not the landlord.

Livestock unit (LSU)

The livestock unit is a reference unit which facilitates the aggregation of livestock from various species and age as per convention, via the use of specific coefficients established initially on the basis of the nutritional or feed requirement of each type of animal. The reference unit used for the calculation of livestock units (=1 LSU) is the grazing equivalent of one adult <u>dairy cow</u> producing 3 000 kg of milk annually, without additional concentrated foodstuffs. The coefficients to be used

with regard to the application of coverage and precision requirements for the calculation of LSU are set out in Annex I of Regulation (EC) No. 1200/2009.

Manager (of an agricultural holding)

In Community Farm Structure Surveys (FSS), the manager is responsible for the normal daily financial and production routines of running the holding concerned. A holder who is a natural person and the sole holder of an independent holding is generally, but not always, also the manager. There can be only one manager on the holding. In cases where the holder is not also the manager, he/she has charged or employed someone else with the running of the holding.

Natura 2000

Natura 2000 is the centrepiece of EU nature & biodiversity policy. It is an EU wide network of nature protection areas established under the 1992 Habitats Directive. The aim of the network is to assure the long-term survival of Europe's most valuable and threatened species and habitats. It is comprised of Special Areas of Conservation (SAC) designated by Member States under the Habitats Directive (Council Directive 92/43/EEC of 21.05.1992), and also incorporates Special Protection Areas (SPA) which they designate under the 1979 Birds Directive (Council Directive 79/409/EEC of 2.04.1979). The establishment of this network of protected areas also fulfils a Community obligation under the UN Convention on Biological Diversity.

Nomenclature of territorial units for statistics (NUTS)

The Nomenclature of territorial units for statistics, abbreviated as NUTS (from the French 'Nomenclature des Unités territoriales statistiques') is a geographical nomenclature subdividing the territory of the European Union (EU) into regions at three different levels (NUTS 1, 2 and 3, respectively, moving from larger to smaller territorial units). Above NUTS 1 is the 'national' level of the Member State. NUTS areas aim to provide a single and coherent territorial breakdown for the compilation of EU regional statistics. The NUTS is based on Regulation 1059/2003 on the establishment of a common classification of territorial units for statistics, approved in 2003 and amended in 2006 by Regulation 105/2007. Two further amending Regulations 1888/2005 and 176/2008, adopted in 2005 and 2008 respectively, extended the NUTS system to the 10 Member States that joined the EU in 2004 and to Bulgaria and Romania. A third amending Regulation 31/2011 has updated the version of NUTS (2010). This publication (except indicators C31 and C34) is based on the NUTS 2010 classification which is valid from 1 January 2012 until 31 December 2014 subdivides the territory of the European Union and lists 28 Member States into 98 NUTS 1 regions, 272 NUTS 2 regions and 1315 NUTS 3 regions. However, it should be noted that the latest NUTS system is based on the NUTS 2013 classification (see: Commission Regulation (EU) No 1319/2013). This is valid from 1 January 2015 and lists 98 regions at NUTS 1, 276 regions at NUTS 2 and 1342 regions at NUTS 3 level. Context indicators C31 and C34 are based on this NUTS version.

At a more detailed level, there are the districts and municipalities. These are called "Local Administrative Units" (LAU) and are not subject of the NUTS Regulation.

In FSS up to survey 2003 and in FADN, specific regions are used, based on different levels of NUTS or recombination of NUTS.

More detailed information on NUTS can be found on Eurostat website: <u>http://ec.europa.eu/eurostat/web/nuts/overview</u>

Purchasing Power Standard (PPS)

The purchasing power standard, abbreviated as PPS, is an artificial currency unit. Theoretically, one PPS can buy the same amount of goods and services in each country. However, price differences across borders mean that different amounts of national currency units are needed for the same goods and services depending on the country. PPS are derived by dividing any economic aggregate of a country in national currency by its respective Purchasing power parities.

PPS is the technical term used by Eurostat for the common currency in which national accounts aggregates are expressed when adjusted for price level differences using PPPs. Thus, PPPs can be interpreted as the exchange rate of the PPS against the euro.

Standard Output

The standard output of an agricultural product (crop or livestock), abbreviated as SO, is the average monetary value of the agricultural output at farm-gate price, in euro per hectare or per head of livestock.

There is a regional SO coefficient for each product, as an average value over a reference period (5 years). The sum of the entire SO per hectare of crop and per head of livestock in a farm is a measure of its overall economic size, expressed in euro.

Statistical classification of economic activities in the European Community (NACE)

The Statistical classification of economic activities in the European Community, abbreviated as NACE (from the French 'Nomenclature statistique des activités économiques dans la Communauté Européenne') is the common statistical classification of economic activities developed since 1970 in the European Union. NACE provides the framework for collecting and presenting a large range of statistical data according to economic activity in the fields of economic statistics (e.g. production, employment, national accounts) and in other statistical domains.

Statistics produced on the basis of NACE are comparable at European and, in general, at world level. The use of NACE is mandatory within the European Statistical System.

The current version is NACE Rev.2, which is the revised version of NACE Rev.1.1. It was adopted in December 2006 and has already been introduced in most basic economic statistics and also in the national accounts. Since December 2011 Eurostat is publishing data for the Member States and European aggregates using NACE Rev.2 for the most recent years. Simultaneous dissemination of NACE Rev.1.1 and NACE Rev.2 data will continue for a transition period to allow users to adapt, although European aggregates will be compiled using only NACE Rev.2.

Although the overall characteristics of NACE remain unchanged, new concepts at the highest level of the classification have been introduced. New detail has been created to reflect different forms of production and emerging new industries. The detail of the classification has substantially increased especially for the service-producing activities.

Sectors primary / secondary / tertiary:

- Primary sector covers branch A of NACE Rev.2 Agriculture, forestry and fishing (divisions 01 to 05 or branches A & B of NACE Rev.1.1).
- Secondary sector covers branches B to F of NACE Rev.2 (divisions 10 to 45 or branches C to F of NACE Rev.1.1).
- Tertiary sector covers branches G to U of NACE Rev.2 (divisions 50 to 95 or branches G to P of NACE Rev.1.1).
- Total refers to branches A to U of NACE Rev.2 (branches A to P of NACE Rev.1.1).

More detailed information of NACE and the NACE Rev.2 revision as well as a correspondence table between NACE Rev.1.1 and NACE Rev.2 can be found on the Eurostat website (see: http://ec.europa.eu/eurostat/en/web/products-manuals-and-guidelines/-/KS-RA-07-015).

Total Factor Productivity (TFP)

Total factor productivity (TFP) compares total output relative to the total inputs used in its production (both output and inputs are expressed in term of volumes). TFP reflects output per unit of some combined set of inputs: an increase in TFP reflects a gain in output quantity which is not originating in an increase of input use. As a result, TFP reveals the joint effects of many factors including new technologies, economies of scale, managerial skill, and changes in the organization of production.

Calculation of total factor productivity requires a large amount of data, many of which are incomplete and/or require estimations and interpolations.

Utilised Agricultural Area (UAA)

In European Farm Structure Surveys (FSS), utilised agricultural area (UAA) is the total area taken up by arable land, permanent grassland, permanent crops and kitchen gardens used by the holding, regardless of the type of tenure or of whether it is used as a part of common land. Common land is the UAA used by the agricultural holding but not belonging directly to it, i.e. on which common rights apply. The choice of implementation method to cover this common land is a matter for the Member States (Regulation (EC) No 1200/2009 of 30.11.2009). The UAA does not include unused agricultural land, woodland and land occupied by buildings, farmyards, tracks, ponds, etc. UAA is also defined within the context of Crops statistics (Council Regulation (EEC) No 837/90 of 26 March 1990 and Council Regulation (EEC) No 959/93 of 5 April 1993) respectively as 1) Area under cereal cultivation for each group of cereals and for any cereal (as specified in the annexes), production of which exceeds 50 000 tonnes per year and 2)) Areas of arable land, permanent grassland, permanent crops and other parts of the UAA apart from arable land (land under crops other than cereals). Permanent grassland shall also include the parts of the UAA outside agricultural holdings. There are major differences at present between the UAA based on the Farm Structure Survey and on the Crop statistics due to the different definitions given in the surveys. Estimates of the UAA based on Corine Land Cover database are also provided and used in this work.

ANNEX D – List of Acronyms

AEI	Agro-Environmental Indicator
ANCs	Area facing natural and other specific constraints
AWU	Annual Work Unit
CAP	Common Agricultural Policy
CMEF	Common Monitoring and Evaluation Framework
EC	European Commission
EEA	European Environment Agency
ESA	European System of Accounts
ESU	European Size Unit
EU	European Union
FSS	Farm Structure Survey
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GHGs	Greenhouse Gases
GVA	Gross Value Added
ha	Hectare
HNV	High Nature Value
IR	Intermediate Region
IRENA	Indicator Reporting on the integration of Environmental concerns into Agricultural policy
JRC	Joint Research Centre of the European Commission
LAU	Local Administrative Units
LSU	Livestock Unit
MS	Member State
NACE	Statistical classification of economic activities in the European Community
NUTS	Nomenclature of territorial units for statistics
OECD	Organisation for Economic Co-operation and Development
PPS	Purchasing Power Standard
PR	Predominantly Rural
PU	Predominantly Urban
R&D	Research and Development
SO	Standard Output
TFP	Total Factor Productivity
UAA	Utilised Agricultural Area

ANNEX E – Correspondence table between NUTS levels and national administrative units

	NUTS 1		NUTS 2		NUTS 3	
BE	Régions	3	Provinces	11	Arrondissements	44
BG	Rajon	2	Rajon na Planirane / Planning Regions	6	Oblasti	28
CZ	Území	1	Oblasti	8	Kraje	14
DK	-	1	Regioner	5	Landsdeler	11
DE	Länder	16	Regierungsbezirke (in most cases)	38	Kreise	412
EE	-	1	Regions	1	Groups of Maakond	5
IE	-	1	Regions	2	Regional Authority Regions	8
EL	Groups of development regions	4	Development regions	13	Nomoi	51
ES	Agrupación de comunidades autónomas	7	Comunidades y ciudades autónomas	19	Provincias + Ceuta y Melilla	59
FR	Z.E.A.T + DOM	9	Régions + DOM	26	Départements	100
HR		1		2		21
IT	Gruppi di regioni	5	Regioni	21	Provincie	110
CY	-	1	-	1	-	1
LV	-	1	-	1	Reģioni	6
LT	-	1	-	1	Apskritys	10
LU	-	1	-	1	-	1
HU	Statisztikai nagyrégiók	3	Tervezési-statisztikai régiók	7	Megyék + Budapest	20
MT	-	1	-	1	Gzejjer	2
NL	Landsdelen	4	Provincies	12	COROP regio's	40
AT	Gruppen von Bundesländern	3	Bundesländer	9	Gruppen von Politischen Bezirken	35
PL	Regiony	6	Województwa	16	Podregiony	66
PT	Continente + Regiões autónomas	3	Comissões de coordenação regional + Regiões autónomas	7	Grupos de Concelhos	30
RO	Macroregiuni	4	Regiuni	8	Judet + Bucuresti	42
SI	-	1	Kohezijske regije	2	Statistične regije	12
SK	-	1	Oblasti	4	Kraje	8
FI	Manner-Suomi, Ahvenananmaa / Fasta Finland, Åland	2	Suuralueet / Storområden	5	Maakunnat / Landskap	19
SE	Grupper av riksområden	3	Riksområden	8	Län	21
UK	Government Office regions; Country	12	Counties (some grouped); Inner and Outer London; Groups of unitary authorities	37	Upper tier authorities or groups of lower tier authorities (unitary authorities or districts)	139
EU-28		98	an Union - Nomenclature of terr	272		1315

Source: Eurostat – Regions in the European Union – Nomenclature of territorial units for statistics - NUTS 2010

COUNTRY CODE	COUNTRY NAME	COUNTRY ENGLISH NAME
BE	Belgique/België	Belgium
BG	България	Bulgaria
CZ	Česká Republika	Czech Republic
DK	Danmark	Denmark
DE	Deutschland	Germany
EE	Eesti	Estonia
IE	Ireland	Ireland
EL	Ελλάδα	Greece
ES	España	Spain
FR	France	France
HR	Hrvatska	Croatia
IT	Italia	Italy
CY	Κὑπρος	Cyprus
LV	Latvija	Latvia
LT	Lietuva	Lithuania
LU	Luxembourg	Luxembourg
HU	Magyarország	Hungary
MT	Malta	Malta
NL	Nederland	Netherlands
AT	Österreich	Austria
PL	Polska	Poland
РТ	Portugal	Portugal
RO	România	Romania
SI	Slovenija	Slovenia
SK	Slovenská Republika	Slovakia
FI	Suomi/Finland	Finland
SE	Sverige	Sweden
UK	United Kingdom	United Kingdom
EU-28		European Union (28 countries)
EU-15		European Union (15 countries)
EU-N13		Member States which joined the EU in 2004, 2007 and 2013 (BG, CZ, EE, HR, CY, LV, LT, HU, MT, PL, RO, SI, SK)
-	Поранешна Југословенска Република Македонија	former Yugoslav Republic of Macedonia
TR	Türkiye	Turkey

ANNEX F – Correspondence table between country codes and country names