Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

Please find attached a draft list of context indicators for discussion at the expert group meeting.
Most of the indicators proposed are part of the current CMEF framework and the list was extended to cover the impact indicators presented in the legal proposal. The fiches of the current CMEF indicators proposed to be part of the PMEF context indicators are made available to the expert group (when relevant and not subject to major modification), although they might require some small adaptations.

Context indicators

Context indicators which incorporate CAP impact indicators are marked with an asterisk (*)

	Indicator No.		Indicator name
	PMEF	**CMEF (current)**	
Population	**C.01**	**C.01**	Population numbers
	C.02	**C.04**	Population density
	C.03	**C.02**	Age structure of the population
Total area	**C.04**	**C.03**	Total area
	C.05	**C.31**	Land cover
Labour market	**C.06**	**C.05**	Employment rate (*)
	C.07	**C.07**	Unemployment rate
	C.08		Employment
		C.11	By sector
			By type of region
		C.13	By economic activity
Economy	**C.09**	**C.08**	GDP per capita (*)
	C.10	**C.09**	Poverty rate (*)
	C.11		Gross value added
		C.10	By sector
		C.10	By type of region
			In agriculture
		R.03_PI	For primary producers (*)
Farms and farmers	**C.12**	**C.17**	Agricultural holdings (farms)
	C.13	**C.22**	Farm labour force
	C.14	**C.23**	Age structure of farm managers
	C.15	**C.24**	Agricultural training of farm managers
	C.16		New farmers (*)
Agricultural land	**C.17**	**C.18**	Agricultural area
	C.18	**C.20**	Irrigated land
	C.19	**C.34**	Farming in Natura 2000 areas
	C.20	**C.32**	Areas facing natural and other specific constraints (ANCs)
	C.21		Agricultural land covered with landscape features (*)
Livestock	**C.22**	**C.21**	Livestock numbers
	C.23		Livestock density

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Agricultural and farm income	C.24	C.25	Agricultural factor income (*)
	C.25	C.26	Agricultural entrepreneurial income
			per AWU (*)
			compared to average economy (*)
	C.26		Farm net value added
			by type of farming (*)
			by region (*)
			by farm size (*)
			in Areas facing natural and other specific constraints (*)
	C.27	C.28	Gross fixed capital formation in agriculture
Agricultural productivity	C.28	C.27	Total factor productivity in agriculture (*)
	C.29		Labour productivity
		C.14	in agriculture
		C.15	in forestry
		C.16	in the food industry
Agricultural trade	C.30	I.06	Agricultural imports and exports (*)
Other gainful activities	C.31	C.30	Tourism infrastructure
Farming practices	C.32	C.19	Agricultural area under organic farming
	C.33	C.33	Farming intensity
	C.34	R.09_PI	Value of production under EU quality schemes (*)
Biodiversity	C.35	C.35	Farmland birds index (FBI) (*)
	C.36		Percentage of species and habitats of Community interest related to agriculture with stable or increasing trends (*)
Water	C.37		Water use in agriculture (*)
	C.38		Water quality
		C.40	Gross nutrient balance – nitrogen (*)
		C.40	Gross nutrient balance – phosphorus
			Nitrates in ground water (*)
Soil	C.39	C.41	Soil organic matter in arable land (*)
	C.40	C.42	Soil erosion by water (*)
Energy	C.41	C.43	Production of renewable energy from agriculture and forestry (*)
	C.42	C.44	Energy use in agriculture, forestry and food industry
Climate	C.43	C.45	Greenhouse gas emissions (*)
	C.44		Index of farm resilience, Adaptation potential to climate change (*)
	C.45		Direct agricultural loss attributed to disasters
Air	C.46	C.45	Ammonia emissions (*)
Health	C.47		Antimicrobials sales in food producing animals (*)
	C.48		Risk and impacts of pesticides (*)

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CONTENT OF FICHES

Indicator Name	*Title of the indicator used in the commission implementing regulation/guidance documents*
Definition	*Concise definition of the concept, including if the indicator already exists, e.g. Agri-environmental indicator (AEI), EUROSTAT indicator. If appropriate, include the methodology/formula for establishment of the indicator*
Unit of measurement	*Unit used to record the value (e.g. ha, tonnes, €, %)*
Data source	*Identification of existing data sources (e.g. EUROSTAT identifying relevant data set, Farm Accountancy Data Network (FADN), European Environmental Agency, etc.)*
References/location of the data	*Links (other references) to data sources (e.g. in EUROSTAT specifying exact tables, FAO, World bank) AEI definitions, regulations establishing indicators, etc.*
Data collection level	*Identification of the geographical level at which the data is available and at which level the indicator should be established*
Frequency	*Frequency at which the indicator is collected/calculated*
Delay	*How old are the data when they become available*
Comments/caveats	*Comments concerning interpretation of the indicator for monitoring and evaluation purposes and its caveats, if appropriate*

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.01	CURRENT CMEF: C.01
Indicator Name	**Population numbers**
Definition	This indicator refers to the **population on 1st of January of any given year: total and by type of region (predominantly rural, intermediate and predominantly urban).**
Unit of measurement	Total population: - inhabitants In each type of region: - % of total population
Data source	Eurostat – population statistics Eurostat –national data by urban-rural typology
References/location of the data	National data: Table Population change - Demographic balance and crude rates at national level [demo_gind] National data, by typology: table Demographic balance and crude rates by other typologies [urt_gind3]
Data collection level	EU, national (NUTS 0)
Frequency	Annual
Delay	1 year
Comments/caveats	The distribution of population by type of region has been calculated using the Commission's urban-rural typology, which classifies NUTS 3 regions into predominantly rural, intermediate and predominantly urban. Some Member States have only some areas, or data for some areas: - MT and LU – only urban area, - CY – only intermediate area, - SI – only rural and intermediate area, - No distinction between rural and intermediate areas: BE 2000-2003, CZ 2000, PL 1995-2009

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.02	CURRENT CMEF: C.04
Indicator Name	**Population density**
Definition	This indicator is calculated as the **annual average population / land area** and refers to the number of inhabitants per km^2. It is provided at total level (national/regional) and for the predominantly rural, intermediate and urban regions.
Unit of measurement	Total - Inhabitants/km^2 In each type of region: - Inhabitants/km^2
Data source	Eurostat – population statistics Eurostat – regional demographic statistics Eurostat – regional statistics by typology
References/location of the data	National data: Table: Population density calculation from demo_r_d3dens Regional data: Table: Population density by NUTS 3 region [demo_r_d3dens] or, in case of missing data: National and regional data by type of region calculated as demo_r_gind3 / demo_r_d3area and classified according to the Commission's urban-rural typology. Most recent urban-rural typology: ec.europa.eu/eurostat/web/rural-development/methodology
Data collection level	EU, national (NUTS 0) and regional (NUTS 1, 2 and 3)
Frequency	Annual
Delay	2 years
Comments/caveats	The distribution of population by type of region has been calculated using the Commission's urban-rural typology, which classifies NUTS 3 regions into predominantly rural, intermediate and predominantly urban. Total area (including inland waters) is used when land area is not available.

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.03	CURRENT CMEF: C.02
Indicator Name	**Age structure of the population**
Definition	This indicator refers to the age structure of the EU population **on 1st of January of any given year by broad age groups (less than 15 years / from 15 to 64 years / 65 years or over), total and by type of region (predominantly rural, intermediate and predominantly urban).** The population is based on data from the most recent population census, adjusted by the components of population change produced since the last census, or based on population registers. In case of missing data for some regions or Member States, the population of the year in question has been estimated based on the population of the previous available year.
Unit of measurement	Total and in each type of region: - persons in each age group - % of total population
Data source	Eurostat - population statistics Eurostat - regional statistics by urban-rural typology
References/location of the data	National data: Table Population on 1 January by broad age group and sex [demo_pjanbroad] Regional data: Table Population on 1 January by broad age group, sex and NUTS 3 region [demo_r_pjanaggr3] National data, by typology: Table Population by sex and age groups on 1 January [urt_pjanaggr3] (see comments) Regional data, by typology: DG AGRI calculation using regional data
Data collection level	EU, national (NUTS 0) and regional (NUTS 1, 2 and 3)
Frequency	Annual
Delay	1 year
Comments/caveats	The age structure by type of region has been calculated using the Commission's urban-rural typology, which classifies NUTS 3 regions into predominantly rural, intermediate and predominantly urban.

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR **C.04**	CURRENT CMEF: C.03
Indicator Name	**Total area**
Definition	This indicator refers to the **total area (including inland waters) and the distribution by type of region (predominantly rural, intermediate and predominantly urban)**. It provides data both in absolute values (for the total EU territory) and as a share of the total area (for the data by type of region).
Unit of measurement	Total area: - km^2 In each type of region: - % of total area
Data source	Eurostat - population statistics Eurostat - regional statistics by urban-rural typology
References/location of the data	National data: DG AGRI calculation using regional data (no table available in Eurostat) Regional data: Table: Area by NUTS 3 region [demo_r_d3area] Regional data, by typology: DG AGRI calculation using regional data
Data collection level	EU, national (NUTS 0)and regional (NUTS 1, 2 and 3)
Frequency	Annual
Delay	1 year
Comments/caveats	In case of missing data, land area has been used instead of total area. The distribution of territory by type of region has been calculated using the Commission's urban-rural typology, which classifies NUTS 3 regions into predominantly rural, intermediate and predominantly urban. Missing data on "Total area" are completed with data on "Land area" of data source [demo_r_d3area].

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR **C.05**	CURRENT CMEF: C.31
Indicator Name	**_Land Cover_**
Definition	The indicator measures the area in the different categories of land cover: - **total agricultural area (agricultural area and natural grassland);** - **total forest area (forest area and transitional woodland-shrub);** - **natural area;** - **artificial area;** - **other area (includes sea and inland water).** Land cover is the actual distribution of forests, water, desert, grassland and other physical features of the land, including those created by human activities. Land use, on the other hand, characterises the human use of a land cover type. The data source used is CORINE Land Cover (CLC). CLC 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. CLC describes land cover (and partly land use) with a three-level nomenclature of 44 classes. For the purpose of this indicator, they have been grouped so as to obtain the four classes of agricultural, forest, natural and artificial land cover. CLC was elaborated based on the visual interpretation of satellite images (IRS, RapidEye, 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.

Level 1	Level 2	Level 3	Reclassification
1 Artificial surfaces	1.1 Urban fabric		Artificial
	1.2 Industrial, commercial and transport units		Artificial
	1.3 Mine, dump and construction sites		Artificial
	1.4 Artificial, non-agricultural vegetated areas		Artificial
2 Agricultural areas	2.1 Arable land		Agricultural
	2.2 Permanent crops		Agricultural
	2.3 Pastures		Agricultural
	2.4 Heterogeneous agricultural areas		Agricultural
3 Forest and seminatural areas	3.1 Forests		Forest
	3.2 Scrub and/or herbaceous vegetation associations	3.2.1 Natural grasslands	Agricultural
		3.2.2 Moors and heathland	Natural
		3.2.3 Sclerophyllous vegetation	Natural
		3.2.4 Transitional woodland-shrub	Forest
	3.3 Open spaces with little or no vegetation		Natural
4 Wetlands	4.1 Inland wetlands		Natural
	4.2 Maritime wetlands		Sea
5 Water bodies	5.1 Inland waters		Inland water
	5.2 Marine waters		Sea

	It should be noted that other sources may give significantly different results, but CLC has a uniform methodology and nomenclature across Europe. Moreover, it is the only dataset which is complete for the EU-28. Nevertheless, in order to reduce and explain the discrepancies with other surveys and national inventories, the estimation of agricultural areas and forest includes separately the CLC classes "Natural grassland" and "Transitional woodland – shrubs", which are, in most cases, likely to be critical in the estimation.
Unit of measurement	% of total area
Data source	**CORINE Land Cover (CLC) 2012**

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References/location of the data	European Environment Agency http://www.eea.europa.eu/data-and-maps/data/corine-land-cover-2006-raster-3 http://land.copernicus.eu/pan-european/corine-land-cover/clc-2012/view
Data collection level	Regional (NUTS 2).
Frequency	CORINE Land Cover: 6 years
Delay	CORINE Land Cover: 3 years (e.g. CLC 2012 available in 2015).
Comments/caveats	

INDICATOR C.06	CURRENT CMEF: C.05
Indicator Name	**Employment rate**
Definition	**Employed persons aged 15-64 years and 20-64 years[1] as a share of the total population of the same age group in thinly populated areas (used as proxy for rural areas)**: <u>Employed persons</u> are all persons aged 15-20 years and over who, during the reference week, worked at least one hour for pay or profit or were temporarily absent from such work. Employed persons comprise employees, self-employed and family workers. <u>Population</u> covers persons aged 15-20 years and over living in private households. This comprises all persons living in the households surveyed during the reference week. This definition also includes persons absent from the households for short periods (but having retained a link with the private household) owing to studies, holidays, illness, business trips, etc. Persons on compulsory military service are not included. **Methodology**: The rural employment rate is calculated at national level using Labour Force Survey (LFS) data aggregated by degree of urbanisation. This degree of urbanisation classifies the territory (Local Administrative Units (LAU)) into rural areas, towns and suburbs and cities. The rural employment rate of each Member State would then correspond to the employment rate of rural areas; this rate could be compared with the employment rates in the other two types of areas or with the employment rate for the whole country. Additionally, employment rates could also be calculated for men and women and even for other age groups, if needed for a better analysis.
Unit of measurement	Total and in each type of area: - % of total population of the same age class and sex
Data source	Eurostat – Labour Force Survey Eurostat – Degree of urbanisation
References/location of the data	Employment rates are calculated by DG AGRI using the following tables: National data, by degree of urbanisation: table lfsa_pgauws (DG AGRI calculation) Regional data, by degree of urbanisation: tables lfst_r_lfe2emp and lfst_r_lfsd2pop
Data collection level	LFS data are collected at LAU level (LAU2), with a sample defined to be significant at NUTS 2 level and at national level.
Frequency	For the LFS: annually, in the second half of the year. For the aggregates by degree of urbanisation: depending on the availability of the new data.
Delay	1 year
Comments/caveats	Although the use of the degree of urbanisation has been selected as the most appropriate for the indicator "rural employment rate", the urban/rural typology is the one to be used when the information is available at NUTS level 3 (for

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[1] In the programming period 2007-2013, the employment rate was calculated for the age group of 15-64 years. In the Europe 2020 strategy, reaching an employment rate of 75% of the population aged 20-64 years is one of the five headline targets to be achieved; however, in rural areas the employment of people below 20 is also an important indicator. Thus it is proposed to keep both age groups, which is also Eurostat's approach.

	example, for the indicator "Rural GDP per capita").
	A change in the methodology to classify local areas from 2012 onwards has produced a break in Eurostat series by type of area (table **lfsa_pgauws**).

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INDICATOR C.07	CURRENT CMEF: C.07
Indicator Name	**Unemployment rate**
Definition	This indicator provides the number of **unemployed persons aged 15-24 years (youth unemployment rate) and 15-74 years (total unemployment rate) as a share of the total economically active population of the same age class: total and in the thinly-populated areas.** Unemployed persons comprise persons who were (all three conditions must be fulfilled simultaneously): 1. without work during the reference week, 2. available for work at the time, 3. actively seeking work. Economically active population is employed plus unemployed.
Unit of measurement	Total and in the thinly-populated areas: - % of total active population of the same age class
Data source	**Eurostat – Labour Force Survey** **Eurostat – Degree of urbanisation**
References/location of the data	National data, by degree of urbanisation: table lfsa_pgauws (DG AGRI calculation, see comments) Regional data (NUTS 1 and 2): table lfst_r_lfu3rt Regional data, by degree of urbanisation: tables lfst_r_lfu3pers and lfst_r_lfp2act
Data collection level	EU, national (NUTS 0) and regional (NUTS 1 and 2)
Frequency	Annual
Delay	1 year
Comments/caveats	For the unemployment rate by type of area, the degree of urbanisation classification, which classifies Local Administrative Units (LAU2) into thinly populated areas (rural areas), intermediate density areas (towns and suburbs) and densely-populated areas (cities), is used. Unemployment rates by degree of urbanisation have been calculated by DG AGRI using the variables 'Unemployed persons' and 'Active population' from the table lfsa_pgauws. A change in the methodology to classify local areas from 2012 onwards has produced a break in Eurostat series by type of area (table lfsa_pgauws). The age classes 15-74 and 15-24 are used both for national and regional tables.

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.08	CURRENT CMEF: C.11
Indicator Name	**Employment** **by sector and by type of region**
Definition	This indicator shows **total employment and distribution by sector (primary, secondary, tertiary) and by type of region (predominantly rural, intermediate and predominantly urban).**
Unit of measurement	Total employment: - 1000 persons For each sector: - % of total employment In each type of region: - % of total employment
Data source	Eurostat – National and Regional Economic Accounts
References/location of the data	National data: table nama_10_a10_e Regional data: table nama_10r_3empers National and regional data, by typology: DG AGRI calculation using regional data Most recent urban-rural typology: ec.europa.eu/eurostat/web/rural-development/methodology
Data collection level	EU, national (NUTS 0) and regional (NUTS 1, 2 and 3)
Frequency	Annual
Delay	1 year (national data) and 3 years (regional data)
Comments/caveats	Sectors in NACE rev.2: Primary sector = branch A (agriculture, forestry and fishing); Secondary sector = branches B-E + F (industry + construction); Tertiary sector = branches G-I + J + K + L + M-N + O-Q + R-U. The distribution of employment by type of region has been calculated using the Commission's urban-rural typology, which classifies NUTS 3 regions into predominantly rural, intermediate and predominantly urban.

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR **C.08**	CURRENT CMEF: C.13
Indicator Name	**Employment** **by economic activity**
Definition	The indicator gives **total employment in agriculture, forestry, the food industry and in tourism in absolute terms** and also as a **share of total employment**. The absolute change and the annual growth of employment at national level are also calculated in general as a three-year average. If the available data allow, the calculation of five-year averages is also possible. The Labour Force Survey (LFS) is the main data source for the domain employment. The EU LFS is a large household sample survey providing quarterly results on labour participation of people aged 15 years and over (16 years and over in Spain, Italy and the United Kingdom, 15-74 years in Estonia, Latvia, Hungary, Finland, Sweden and Denmark). In the Eurostat LFS database (according to the NACE rev.2 divisions) agriculture corresponds to "crop and animal production, hunting and related activities" (A01), while forestry means "forestry and logging" (A02), the food industry is equal to "manufacture of food products" (C10) and "manufacture of beverages" (C11) and "manufacture of tobacco products" (C12), tourism corresponds to "accommodation" (I55) and "food and beverage service activities" (I56).
Unit of measurement	1000 persons and % of total employment
Data source	Eurostat – Labour Force Survey
References/location of the data	Eurostat website, Labour Force Survey: lfsa_egan2 and lfsa_egan22d Regional data: lfst_r_lfe2en2 for totals; employment by economic activity on special request to Eurostat
Data collection level	EU, national (NUTS 0) and regional (NUTS 1 and 2)
Frequency	Regional data at NUTS 2 level are published as annual averages of quarterly data. The calculation of the indicator is made on a yearly basis.
Delay	1 year
Comments/caveats	

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.09	CURRENT CMEF: C.08
Indicator Name	**GDP per capita**
Definition	**Gross Domestic Product (GDP)** per capita in predominantly rural regions, in **Purchasing Power Standard (PPS)**[2] The PPS per inhabitant in rural areas can be compared to the PPS per inhabitant at national level (without distinction by type of region) or to other aggregations (EU-15, EU-N13). In particular, the following indicators are calculated by Eurostat: • PPS per inhabitant in rural, intermediate and urban areas • PPS per inhabitant in percentage of the EU average for rural, intermediate and urban areas.
Unit of measurement	PPS (for the simple reporting of absolute values) % (for comparison of values from rural areas to those of other areas or to the EU average)
Data source	Eurostat – National and Regional Economic Accounts Eurostat — Rural development statistics
References/location of the data	National data: table nama_10_gdp, nama_10_pc, prc_ppp_ind, demo_gind Regional data: table nama_10r_3popgdp, nama_10r_3gdp National and regional data, by urban-rural typology: DG AGRI calculation using regional data Most recent urban-rural typology: ec.europa.eu/eurostat/web/rural-development/methodology
Data collection level	EU, national (NUTS 0) and regional (NUTS 1, 2 and 3)
Frequency	Annual
Delay	1 year (national data) and 3 years (regional data)
Comments/caveats	As an average, this indicator does not measure the distribution of income within a given geographical area. Furthermore, non-monetary exchanges (production for self- consumption; public goods and externalities; barter; unpaid family labour) are not taken into account but can be substantial in some sectors (especially in agriculture) and regions.

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[2] 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.

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INDICATOR C.10	CURRENT CMEF: C.09
Indicator Name	**Poverty rate**
Definition	**The indicator is defined as the share of population at risk of poverty or social exclusion in thinly populated areas (rural areas)**, as defined in the classification of the degree of urbanisation (DEGURBA). It is calculated as the percentage of people who are at risk of poverty or severely deprived or living in a household with low work intensity over the total population. The at-risk-of-poverty rate is the share of people with an equivalised disposable income (after social transfer) below the at-risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income after social transfers (http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:At-risk-of-poverty_rate). The degree of rural poverty (share of population at risk of poverty) can be compared to the overall EU-28 average, to the respective national average and/or to the average for intermediate and/or urban areas in a Member State or in the EU-28 (choice to be made according to the policy objective).
Unit of measurement	Total and in the thinly-populated areas: - % of total population
Data source	Eurostat – Survey on income and living conditions (SILC) Eurostat – Degree of urbanisation
References/location of the data	National data: table ilc_peps01 Regional data: table ilc_peps11 (regional data are not available for some MS) National data, by degree of urbanisation: table ilc_peps13 Regional data, by degree of urbanisation: not available
Data collection level	EU, national (NUTS 0) and regional (NUTS 1 and 2)
Frequency	Annual
Delay	2 years
Comments/caveats	The indicator is available by degree of urbanisation (Eurostat explanation): 1. Densely populated area (cities): at least 50 % lives in high-density clusters; in addition, each high-density cluster should have at least 75 % of its population in densely-populated local administrative units (LAU2); 2. Intermediate density area (towns and suburbs): less than 50 % of the population lives in rural grid cells and less than 50 % live in high-density clusters; 3. Thinly-populated area (rural area): more than 50 % of the population lives in rural grid cells.

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.11	CURRENT CMEF: C.10
Indicator Name	**Gross value added** **by sector and by type of region**
Definition	**Total Gross Value Added (GVA) (at basic prices) and distribution by sector (primary, secondary, tertiary) and by type of region (predominantly rural, intermediate and predominantly urban).** GVA is defined as the value of output less the value of intermediate consumption. Output is valued at basic prices, GVA is valued at basic prices and intermediate consumption is valued at purchasers' prices.
Unit of measurement	Total GVA: - EUR million For each sector: - % of total GVA In each type of region: - % of total GVA
Data source	Eurostat – National and Regional Economic Accounts
References/location of the data	National data: table nama_10_a10 Regional data: table nama_10r_3gva National and regional data, by typology: DG AGRI calculation using regional data Most recent urban-rural typology: ec.europa.eu/eurostat/web/rural-development/methodology
Data collection level	EU, national (NUTS 0) and regional (NUTS 1, 2 and 3)
Frequency	Annual
Delay	1 year (national data) and 3 years (regional data)
Comments/caveats	Sectors in NACE rev.2: Primary sector = branch A (agriculture, forestry and fishing); Secondary sector = branches B-E + F (industry + construction); Tertiary sector = branches G-I + J + K + L + M-N + O-Q + R-U. The distribution of GVA by type of region has been calculated using the Commission's urban-rural typology, which classifies NUTS 3 regions into predominantly rural, intermediate and predominantly urban.

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.11	CURRENT CMEF: R.03_PI
Indicator Name	**Gross value added** Value added for primary producers in the food-chain
Definition	The indicator looks at the structure of the food chain and calculates the share of the primary production (agriculture) on the total value added generated by different participants of the food chain (primary production, food manufacturing, food distribution and food service activities).
Unit of measurement	- Million EUR for: agriculture (primary production); food and beverages manufacturing (food manufacturing); food and beverages distribution (food distribution); food and beverages consumer services (food service activities); and total - % of agriculture in total value added in the food chain
Data source	Eurostat – Economic Accounts for Agriculture and Structural Business Statistics
References/location of the data	Value added of the primary production (agriculture) Gross value added at basic prices + subsidies on production -other taxes on production (table Economic accounts for agriculture - aact_eaa01) ' Available at: http://ec.europa.eu/eurostat/web/products-datasets/-/aact_eaa01 Value added of the food and beverages manufacturing (food manufacturing) Manufacture of food products (C10) + beverages (C11) + tobacco products (C12) (table Annual enterprise statistics for special aggregates of activities (NACE Rev. 2) - sbs_na_sca_r2) Available at: http://ec.europa.eu/eurostat/web/structural-business-statistics/data/database Value added of the food and beverages distribution (food distribution) Agents involved in the sale of food, beverages and tobacco (G4617) + Wholesale of food, beverages and tobacco (G463) + Retail sale in non-specialised stores with food, beverages or tobacco predominating (G4711) + Retail sale of food, beverages and tobacco in specialised stores (G472) + Retail sale via stalls and markets of food, beverages and tobacco products (G4781) (table Annual detailed enterprise statistics for trade (NACE Rev. 2 G) - sbs_na_dt_r2) Available at: http://ec.europa.eu/eurostat/web/structural-business-statistics/data/database Value added of the food and beverages consumer services (food service activities) Food and beverage service activities (table Annual detailed enterprise statistics for services (NACE Rev. 2 H-N and S95) - sbs_na_1a_se_r2)' Available at: http://ec.europa.eu/eurostat/web/structural-business-

	statistics/data/database
Data collection level	EU and Member States
Frequency	- Annually for the Economic Accounts for Agriculture (final data received in September of Y+1 and published in October Y+1) - Every 18 months for the Structural Business Statistics (final data ought to be sent to Eurostat 18 months after the end of the reference period (Y))
Time lag	- Data in the Economic Accounts is available for year Y-1 - Data in the Structural Business Statistics is available for year Y-3.
Comments/caveats	The whole food manufacturing is covered as well as the food distribution of three products (food, beverages, tobacco). However, the share is still an over-estimate, as the value-added of the primary production includes also other products (e.g. textiles and bio-industries outlets, which have been excluded, when possible, in the rest of the food chain added value). Additionally, the food distribution covers all possible channels (both retail and wholesale) as their importance on sales in individual Member States differs. Food and beverages distribution - from 2011, EU-28 is the sum of reported EU-28 values for respective distribution channels. The discrepancy between the sum of individual MS and EU-28 originates in the estimated MS data in cases where no data is available (e.g. for confidentiality reasons). The same applies to the food and beverage service activities.

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.12	CURRENT CMEF: C.17
Indicator Name	**Agricultural holdings (farms)**
Definition	This indicator consists of five sub-indicators: • Number of agricultural holdings • Agricultural size of the holdings - in utilised agricultural area (UAA) size classes • Economic size of the holdings - in standard output (SO) classes • Labour force - in persons and in annual work units (AWU) • Average size of the holdings - physical (UAA), economic (standard output), labour in persons and AWU The first four sub-indicators provide basic information on the total number of farms, ha of UAA, EUR of SO and the total number of persons employed or AWU for each EU Member State. Quantities are presented in absolute figures and serve as a basis for the calculation of the fifth sub-indicator. The physical farm size measured in ha of UAA per farm contains the following size classes: • Zero ha • Less than 2 ha • From 2 to 4.9 ha • From 10 to 19.9 ha • From 20 to 29.9 ha • From 30 to 49.9 ha • From 50 to 99.9 ha • 100 ha and over The economic farm size is measured according to the following classes: • Zero EUR • Less than 2 000 EUR • From 2 000 to 3 999 EUR • From 4000 to 7 999 EUR • From 8000 to 14 999 EUR • From 15 000 to 24 999 EUR • From 25 000 to 49 999 EUR • From 50 000 to 99 999 EUR • From 100 000 to 249 999 EUR • From 250 000 to 499 999 EUR • 500 000 EUR and over The fifth sub-indicator provides information on: • the average physical (ha UAA/holding), • economic (EUR of SO/holding) • labour size of the holdings (persons/holding; AWU/holding).

Fiches already in use under current CMEF where relevant and no major modification

Unit of measurement	Farms: number of farms UAA: number of ha Labour force: number of AWU, number of persons Average physical farm size: ha/farm Average economic farm size: EUR/farm Average labour force size: person/holding; AWU/holding
Data source	Eurostat – Farm Structure Survey (FSS)
References/location of the data	For number of farms, for the physical size (ha of UAA) and for the economic size of farms (SO): [ef_kvaareg] For the labour force size: [ef_olfreg] For regional data: [ef_kvecsleg] and [ef_olfreg]
Data collection level	EU, national (NUTS 0) and regional (NUTS 1 and 2)
Frequency	FSS: full census every 10 years, intermediate surveys 2/3 times in-between.
Delay	2-3 years
Comments/caveats	Persons include regular labour force only.

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.13	CURRENT CMEF: C.22
Indicator Name	**Farm labour force**
Definition	The indicator shows the **labour force directly employed by the agricultural holding and working regularly, in persons and in Annual Work Units (AWU).**
	The farm labour force of the holding includes all persons having completed their compulsory education (having reached school-leaving age) who carried out farm work on the holding during the 12 months ending on the reference day of the survey. All persons of retirement age who continue to work on the holding are included in the farm labour force.
	Total and by sex for the different categories of farm labour force:
	• regular labour force:
	➢ family labour force (sole holders working in the farm + members of the sole holder's family working in the farm)
	➢ non-family labour force
	• non-regular labour force (only AWU)
Unit of measurement	1000 persons or AWU
Data source	Eurostat – Farm Structure Survey (FSS)
References/location of the data	For national data: [ef_olfaa]
	For regional data and labour force by sex: [ef_olfreg]
Data collection level	EU, national (NUTS 0) and regional (NUTS 1 and 2)
Frequency	FSS: full census every 10 years, intermediate surveys 2/3 times in-between.
Delay	2-3 years
Comments/caveats	Due to the high share of part-time work in agriculture, labour input can be better assessed in terms of AWU than in terms of persons.

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.14	CURRENT CMEF: C.23
Indicator Name	**Age structure of farm managers**
Definition	The indicator shows the **total number of managers in different age categories and also the percentage of managers who are younger than 35 years.** The indicator also provides information on the **ratio between young farm managers (less than 35 years) and farmers of 55 years or older**.
	The manager of the holding is the natural person responsible for the normal daily financial and production routines of running the holding concerned. The holder is the natural person, group of natural persons or 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 manager and the holder can be the same person.
Unit of measurement	Number of managers, % of total farm managers, ratio of young managers to elderly
Data source	Eurostat – Farm Structure Survey (FSS)
References/location of the data	National data: [ef_kvage]
	Regional data on special request to Eurostat
Data collection level	EU, national (NUTS 0) and regional (NUTS 1 and 2)
Frequency	FSS: full census every 10 years, intermediate surveys 2/3 times in-between.
Delay	2-3 years
Comments/caveats	Data at regional level (NUTS 1 or 2) on the age of farm managers are not available in the Eurostat public database and need to be requested from Eurostat.

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.15	CURRENT CMEF: C.24
Indicator Name	**Agricultural training of farm managers**
Definition	The indicator provides information on **the share of farm managers who have attained basic and full education levels in agriculture.** **The indicator also shows the share of young farm managers (below 35 years) in total with the different levels (basic and full) of agricultural training acquired by them.** The different categories of agricultural training are defined as follows: • <u>Only practical agricultural experience</u>: experience acquired through practical work on an agricultural holding. • <u>Basic agricultural training</u>: any training courses completed at a general agricultural college and/or an institution specialising in certain subjects (including horticulture, viticulture, sylviculture, pisciculture, veterinary science, agricultural technology and associated subjects). A completed agricultural apprenticeship is regarded as basic training. • <u>Full agricultural training</u>: 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 or an associated subject. In the case of Italy, the definition of "training in agriculture" does not correspond to the content described above. It refers rather to the general education level of the farmer. According to the Italian definition: - practical experience means: the farmer has completed no type of education (primary school, secondary education, higher education); - basic training means: the farmer completed at least primary education, but did not complete agricultural higher education; - full training means: the farmer has completed higher or tertiary education at an agricultural college/university/college-level institute/vocational school..
Unit of measurement	Number of managers at each level of agricultural training and as percentage of total farm managers
Data source	Eurostat – Farm Structure Survey
References/location of the data	National data: [ef_mptrainman] Regional data: on special request to Eurostat
Data collection level	EU, national (NUTS 0) and regional (NUTS 1 and 2)
Frequency	FSS: full census every 10 years, intermediate surveys 2-3 times in-between.
Delay	2-3 years
Comments/caveats	Data at regional level (NUTS 1 or 2) on the training of farm managers are not available in the Eurostat public database and need to be requested from Eurostat.

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.17	CURRENT CMEF: C.18
Indicator Name	**Agricultural area**
Definition	The indicator is expressed as **the total utilised agricultural area (UAA) in absolute terms (ha) and as the share of UAA in different categories of land use.** According to the definition applied in the Eurostat database, **these categories of land use are** as follows: • **Arable land** • **Permanent grassland** • **Permanent crops** • Kitchen gardens A small part of UAA dedicated to kitchen gardens is not considered in this indicator; therefore the share of arable crops, permanent grassland & meadow and permanent crops may not sum up to 100%.
Unit of measurement	Number of ha; % of total UAA
Data source	Eurostat – Agricultural production – Crop production
References/location of the data	National and regional data:[apro_cpsh1]; [apro_cpshr]
Data collection level	EU, national (NUTS 0) and regional (NUTS 1 and 2)
Frequency	Annual
Delay	1 year
Comments/caveats	Codes for land use: main area (MA), arable land (ARA), permanent grassland (J0000) and permanent crops (PECR).

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.18	CURRENT CMEF: C.20
Indicator Name	**Irrigated land**
Definition	The indicator shows **the total irrigated land** and is expressed in hectares (ha) and as percentage of the total Utilised Agricultural Area (UAA). Irrigated area is defined as the area of crops which have actually been irrigated at least once during the 12 months prior to the reference day of the survey. Crops under glass and kitchen gardens, which are almost always irrigated, should not be included. Utilised Agricultural Area consists in the total area taken up by arable land, permanent grassland, permanent crops and kitchen gardens. As a general assumption, crops under glass (greenhouses) as well as kitchen gardens are considered actually irrigated areas but should not be included here. However, national methodologies may differ when including or excluding 'areas under glass' and 'kitchen gardens' in the 'total irrigated areas'; possible inconsistencies are being scrutinized by Eurostat.
Unit of measurement	Ha and %
Data source	Eurostat - Farm Structure Survey (FSS), Survey on Agriculture Production Methods (SAPM) 2010.
References/location of the data	National and regional data: table ef_poirrig
Data collection level	National (NUTS 0) and regional (NUTS 1 and 2)
Frequency	The Survey on Agricultural Production Methods (SAPM) is a once-only survey carried out in 2010.
Delay	2-3 years (Eurostat, Survey on Agricultural Production Methods)
Comments/caveats	The availability of this data source in the future is under discussion.

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.19	CURRENT CMEF: C.34
Indicator Name	**Farming in Natura 2000 areas**
Type of indicator	**Environment**
Definition	This indicator consists of 3 sub-indicators : ● **% of territory under Natura 2000** ● **% of UAA under Natura 2000** ● **% of forest area under Natura 2000** This indicator provides information on the preservation of the natural environment and landscape and on the protection and improvement of natural resources. Under Natura 2000, a network of areas is designated to conserve natural habitats and species of wildlife which are rare, endangered or vulnerable in the European Union. The Natura 2000 network consists of sites: •　designated by Member States as Special Protection Areas (SPA) under the Birds Directive (Council Directive 79/409/EEC of 2 April 1979), •　proposed by Member States as Sites of Community Importance (pSCI) and later designated as Special Areas of Conservation (SAC) under the Habitats Directive (Council Directive 92/43/EEC of 21 May 1992). For the Special Protection Areas designated under the Birds Directive, the responsibility for designation lies entirely with the Member States. The Commission (DG Environment) has to be informed when new areas are designated or existing areas are modified. The information received on new or revised areas is passed on to the European Environment Agency (EEA), which regularly produces consolidated versions of the SPA database for the whole EU. For the proposed Sites of Community Importance, which will in the future be Special Areas of Conservation under the Habitats Directive, there is a three-stage process that starts with a proposal by Member States. The proposals are transferred to the Commission, which evaluates with the European Topic Centre on Biological Diversity (ETC_BD) whether or not the proposed sites ensure sufficient protection and, on the basis of that evaluation, asks the Member States to propose more sites whenever necessary. The EEA regularly (once a year) compiles all the information received into a single EU database. The lists of sites foreseen in the Habitats Directive are divided into nine bio-geographic regions (Pannonian, Boreal, Continental, Atlantic, Alpine, Macaronesian, Black Sea, Steppic and Mediterranean) within the territory of the Union. The first list for the Macaronesian region was agreed in December 2001. The second list was adopted in December 2003 for the Alpine region, followed in 2004 by the lists for the Continental and Atlantic regions. The list for the Boreal region was adopted in 2005, and the list for the Mediterranean region in 2006. The lists for the Steppic and the Black Sea regions were adopted in 2008. Natura 2000 sites include different types of European ecosystems. Some sites are in coastal areas or in open marine waters, some contain lakes or are riverine, and many include forest and farmland. For calculating an improved version of this indicator, geo-referenced information is required. The data sets used consist of the Natura 2000 Spatial Dataset and the CORINE Land Cover (CLC) raster dataset. Although CLC categories do not fully correspond to the statistical definitions of agricultural area (UAA) or forests, the overlay of the two data sets allows an accurate geographical estimation of land use data inside Natura 2000 sites. To reduce and explain the discrepancies with other surveys and national inventories, the estimation of the UAA and forest includes separately the CLC classes "Natural grassland" and "Transitional woodland –shrubs". CLC classes are aggregated to estimate: -　Total farmland (UAA): CLC classes 2xx and 321 -　Forest area : CLC classes 31x and 324

Fiches already in use under current CMEF where relevant and no major modification

<table>
<tr>
<td></td>
<td>Please note that the situation regarding Natura 2000 sites is constantly evolving and therefore the data represent only a snapshot of the situation at a reference date.

The figures relating to the area coverage of Natura 2000 sites have been obtained by GIS analysis performed by DG Environment and the EEA.</td>
</tr>
<tr>
<td>Unit of measurement</td>
<td>% of area under Natura 2000</td>
</tr>
<tr>
<td>Data source</td>
<td>Natura 2000 Barometer Statistics Report (release version End2016 – 2017-02-02)
Natura 2000 data
CORINE Land Cover (CLC)</td>
</tr>
<tr>
<td>References/location of the data</td>
<td>Natura 2000 Barometer statistics

https://www.eea.europa.eu/themes/biodiversity/document-library/natura-2000/natura-2000-network-statistics/natura-2000-barometer-statistics/statistics/barometer-statistics

Natura 2000 data - the European network of protected sitehttps://www.eea.europa.eu/data-and-maps/data/natura-8

https://www.eea.europa.eu/data-and-maps/figures/natura-2000-birds-and-habitat-directives-8

CORINE Land Cover (CLC)

https://www.eea.europa.eu/data-and-maps/data/natura2000-clc-by-nuts</td>
</tr>
<tr>
<td>Data collection level</td>
<td>Regional (NUTS 2).</td>
</tr>
<tr>
<td>Frequency</td>
<td>Natura 2000: every year
CORINE Land Cover: every 6 years</td>
</tr>
<tr>
<td>Delay</td>
<td>Natura 2000: 1 year
CORINE Land Cover: 3 years.</td>
</tr>
<tr>
<td>Comments/caveats</td>
<td></td>
</tr>
</table>

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR **C.20**	CURRENT CMEF: C.32
Indicator Name	**Areas facing natural and other specific constraints - ANCs**
Definition	The characterisation of agricultural areas designated as areas facing natural or other specific constraints provides useful information on the environment in which the policy is implemented. The indicator measures the **share of agricultural area in different categories of areas facing natural or other specific constraints (ANCs)** (ex-LFAs as they were defined in the period 2007-2013): • Mountain areas (incl. areas north of the 62nd parallel) (ex-LFA mountain); • Areas, other than mountain areas, facing significant natural constraints (ex-LFA intermediate); • Other areas affected by specific constraints (ex-LFA specific). Article 32 of Regulation (EU) No 1305/2013 defines the areas facing natural or other specific constraints, which are eligible for payments to farmers. They are classified according to three categories, each of which describes a specific cluster of natural or other specific constraints affecting agricultural production in the area concerned. The area designations and other requirements for ANCs have changed in comparison to the programming period 2007-2013 and to Regulation (EC) No 1698/2005 and Regulation (EC) No 1257/99, which are repealed. While no revision of the designation of mountain areas or areas affected by specific constraints is foreseen in Regulation (EU) No 1305/2013 (apart from the possibility to apply the combination of biophysical criteria for the designation of areas affected by specific constraints), areas facing natural constraints other than mountain (former LFA intermediate) should be delimited according to eight biophysical criteria, as defined in Annex III of Regulation (EU) No 1305/2013, covering climate, poor soil productivity and steep slopes. Each (sub)criterion has a predefined threshold, e.g. slopes with a gradient of 15% (or more) which identifies the trigger for the area to be considered as severely constrained from the agricultural production point of view. Measurement of constraint(s) takes place at the level of Local Administrative Units (LAU) 2 (which corresponds to municipality level in most Member States) or at the level of clearly delineated, contiguous local units. The latter should have a definable economic and administrative identity. Farming in the respective local unit can be considered as being constrained if constraints are present on at least 60 % of the local unit's agricultural area. The new legislation also stipulates the mechanism of fine-tuning, i.e. for excluding those administrative units where a constraint has been documented but it has been overcome by investments or by economic activity. The fine-tuning exercise is a part of the designation exercise. New data on ANCs are reported by Member States within the programming period 2014-2020.
Unit of measurement	% of the utilised agricultural area (UAA)
Data source	DG Agriculture and Rural Development: data are reported by Member States during the programming period 2014-2020.
References/location of the data	DG Agriculture and Rural Development on request.
Data collection level	National, regional. Areas facing natural constraints, other than mountain: Data are reported at the level of LAU2 or another LAU (a number of Member States use different administrative units for the delimitation of these areas).

Fiches already in use under current CMEF where relevant and no major modification

	Areas affected by specific constraints: Data collection may be carried out at the level of area designation. In case the designation is carried out according to the "combination of biophysical criteria", as defined in the third paragraph of Article 32(4) of Regulation (EU) No 1305/2013, the data collection level should be LAU2 or another clearly delineated local unit.
Frequency	Data available at present: At the moment data on LFAs are from 2005 (and from 2007 in the case of BG and RO).
Delay	
Comments/caveats	Member States may complete the delimitation of the ANCs other than mountain (former LFA intermediate) until the end of 2017. Meanwhile, the previous area designations are in force.

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.22	CURRENT CMEF: C.21
Indicator Name	**Livestock units**
Definition	This indicator gives **the total number of livestock units (LU) of the holdings with livestock**. LU is a reference unit which facilitates the aggregation of livestock from various species and ages. LU coefficients are used instead of the actual number of animals in order to make comparable aggregations of different animal categories.
Unit of measurement	Number of LU
Data source	Eurostat – Farm Structure Survey (FSS)
References/location of the data	For national and regional data: [ef_olslsuft] and [ef_olsaareg]; [ef_olslsureg]
Data collection level	EU, national (NUTS 0) and regional (NUTS 1 and 2)
Frequency	FSS: full census every 10 years, intermediate surveys 2/3 times in-between.
Delay	2-3 years
Comments/caveats	For the coefficients used to calculate the LU in the FSS 2010, see Annex I of Commission Regulation (EC) No 1200/2009: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32009R1200:EN:NOT

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.24	CURRENT CMEF: C.25
Indicator Name	**Agricultural factor income**

Definition	**Agricultural factor income** measures the remuneration of all factors of production (land, capital, labour) regardless of whether they are owned or borrowed/rented and represents all the value generated by a unit engaged in an agricultural production activity.
	
	It corresponds to the **net value added at factor cost.**
	Value of agricultural production
	      - variable input costs (fertilisers, pesticides, feed, etc.)
	      - depreciation
	      - total taxes (on products and production)
	      + total subsidies (on products and production)
	= agricultural factor income (net value added at factor costs)
	
	The indicator consists of two sub indicators:
	
	A. Agricultural factor income per annual work unit (AWU). An AWU in agriculture corresponds to the work performed by one person who is occupied on an agricultural holding on a full-time basis. For this indicator, total (paid and unpaid) AWU are used.
	B. The **index of agricultural factor income per AWU** is already available in Eurostat's Economic Accounts for Agriculture as **Indicator A.** This index is particularly suited for showing developments over time.

Unit of measurement	A. EUR (in real terms)/AWU B. Index 2005 =100
Data source	A. Eurostat, Economic Accounts for Agriculture and Agricultural Labour Input Statistics B. Eurostat, Economic Accounts for Agriculture

References/location of the data	**Agricultural factor income:**
	Economic accounts for agriculture - values at real prices (aact_eaa04)
	   • Production value at basic price
	   • Factor income: code 26000
	Agricultural labour input:
	Agricultural Labour Input Statistics: absolute figures (1 000 annual work units) (aact_ali01)
	Index of agricultural factor income/AWU (Indicator A):
	Economic accounts for agriculture - agricultural income (indicators A, B, C) (aact_eaa06)

Data collection level	A. EU, national (NUTS 0) and regional (NUTS 1 and 2) – where data are available B. EU and national (NUTS 0)
Frequency	Annual
Delay	1 year
Comments/caveats	Agricultural factor income is best suited for evaluating the impact of changes in the level of public support (i.e. direct payments) on the capacity of farmers to reimburse capital, pay for wages and rented land

	as well as to reward their own production factors. In this context one should note that the proportion of own and external production factors varies in some cases significantly between and within Member States and that the remuneration of own and external production factors is often unequal at farm level.
	Regional data are not available for all Member States.

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.25	CURRENT CMEF: C.26
Indicator Name	**Agricultural entrepreneurial income**

Definition	Agricultural entrepreneurial income[3] measures the income derived from agricultural activities that can be used for the remuneration of own production factors, i.e. non-salaried (= family) labour, land belonging to the agricultural holding and own capital. It is obtained by deducting wages, rent and interest payments from agricultural factor income (see C. 25).
	
	Value of agricultural production
	    - variable input costs (fertilisers, pesticides, feed, etc.)
	    - depreciation
	    - total taxes (on products and production)
	    + total subsidies (on products and production)
	= agricultural factor income (net value added at factor costs)
	    - wages
	    - rents
	    - interest paid
	= agricultural entrepreneurial income
	
	In the case of family farms (sole proprietorships), entrepreneurial income represents, on the one hand, the compensation of the work performed by the agricultural holder (and the work of non-salaried family members) and, on the other hand, the income remaining with the enterprise, without it being possible to separate these two components. It is, therefore, a mixed income.
	
	A. Agricultural entrepreneurial income per unpaid annual work unit (AWU) is expressed in absolute terms or as an index.
	
	The index of agricultural entrepreneurial income per unpaid AWU can be obtained directly from Eurostat's Economic Accounts for Agriculture as Indicator B.
	
	B. Furthermore, agricultural entrepreneurial income per unpaid AWU is compared with the average wages in the economy.
	
	The components of the indicator are:
	
	- **Agricultural entrepreneurial income** (in real and current prices)
	- **AWU in agriculture,** which corresponds to the work performed by one person who is occupied on an agricultural holding on a full-time basis. A distinction is made between salaried and non-salaried AWU, which together make total AWU. Agricultural entrepreneurial income is divided by non-salaried AWU in order to show the level of agricultural entrepreneurial income for the farm holder and members of his/her family. In order to compare this "family farm income" with the average wages in the economy, AWUs in agriculture need to be converted into number of hours worked: a standard conversion factor of 1800

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[3] See also Annex I Chapter V Agricultural Income Indicators of Regulation (EC) No 138/2004 of the European Parliament and of the Council of 5 December 2003 on the economic accounts for agriculture in the Community.

	hours per AWU and per year is used.
	- **Gross wages and salaries in all NACE activities** at current prices in cash and in kind. Wages and salaries in cash include the values of any social contributions, income taxes, etc. payable by the employee, even if withheld and actually paid directly by the employer on behalf of the employee.
	- The **total number of hours worked per employee in all NACE activities**.
Unit of measurement	A: EUR/ non-salaried AWU or index value B: %
Data source	Eurostat – Economic Accounts for Agriculture Eurostat – Agricultural Labour Input Statistics Eurostat – National Accounts
References/location of the data	**Agricultural entrepreneurial income:** *Economic accounts for agriculture - values at current prices (aact_eaa01)* *Economic accounts for agriculture - values at real prices (aact_eaa04)* • Production value at basic price • Entrepreneurial income: code 31000 **Agricultural labour input**: *Agricultural Labour Input Statistics: absolute figures (1 000 annual work units) (aact_ali01)* **Index of agricultural entrepreneurial income/non-salaried AWU (Indicator B):** *Economic accounts for agriculture – agricultural income (indicators A, B, C) (aact_eaa06)* **Wages and salaries:** *National Accounts by 10 branches - aggregates at current prices: gross wages and salaries (nama_nace10_c)* **Employment:** *National Accounts by 10 branches - employment data (nama_nace10_e)*
Data collection level	A. EU, national (NUTS 0) and regional (NUTS 1 and 2) – where data are available B. EU and national (NUTS 0)
Frequency	Annual
Delay	1 year
Comments/caveats	It has to be borne in mind that these income aggregates are not indicators of total income or of the disposable income of households employed in agriculture, because the latter, in addition to their purely agricultural incomes, may also have income from other sources (non-agricultural activities, remuneration, social benefits, and income from property). In other words, agricultural entrepreneurial income must not be regarded as farmers' income. Moreover, this measure of income relates to the income generated by agricultural activities (as well as inseparable non-agricultural secondary activities) over a given accounting period, even though in certain cases the corresponding revenues will not be received until a later date. It does not, therefore, constitute the income effectively received in the course of the

	accounting period itself.
	The indicator farm household income cannot be calculated as there is no methodology or data in Eurostat for this purpose.
	Regional data are not available for all Member States. The comparison of agricultural entrepreneurial income with average wages in the economy cannot be done at regional level.

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.27	CURRENT CMEF: C.28
Indicator Name	**Gross fixed capital formation in agriculture**
Type of indicator	**Sectorial**
Definition	The indicator measures **producers' investments, deducting disposals, in fixed assets during a given period plus certain additions to the value of non-produced assets** realized by the productive activity of producer or institutional units (ESA 2010 definition). Therefore, GFCF is a key element for future competitiveness. It is measured in absolute terms and as a percentage of Gross Value Added (GVA) in agriculture.
Unit of measurement	EUR million (in current prices); % of GVA in agriculture.
Data source	Eurostat – Economic Accounts for Agriculture, National Accounts
References /location of the data	National data: table aact_eaa01 (aact_eaa05 and aact_eaa07 were used to calculate GFCF at constant prices) Regional data: table nama_10r_3gva (GVA in agriculture, forestry and fishing) and nama_10_2gfcf
Data collection level	National (NUTS 0) Regional (NUTS 1 and 2)
Frequency	Annual
Delay	The expected delay will be two to three years, depending on the database.
Comments /caveats	GFCF variables for table aact_eaa01: Production value at basic price; 34000 Gross fixed capital formation (excluding deductible VAT); variables for table nama_10r_2gfcf: Agriculture, forestry and fishing. GVA variables for table aact_eaa01: Gross value added at basic prices; variable for table nama_10r_3gva: Agriculture, forestry and fishing. There are differences between national and regional data since the former is based on the Economic accounts for agriculture and the latter is related to the National Accounts (ESA 2010).

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.28	CURRENT CMEF: C.27
Indicator Name	**Total factor productivity in agriculture**
Definition	**Total factor productivity (TFP) compares total outputs relative to the total inputs used in production of the output. As both output and inputs are expressed in term of volume indices, the indicator measures TFP growth.** The change in production and input volumes is measured over a defined period (2005=100). To aggregate the different output (and input) volume indices, the production (and input) values are used as weights. This allows capturing the relative importance between outputs, or inputs. **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 from an increase of input use.** As a result, TFP reveals the joint effects of many factors including new technologies, efficiency gains, economies of scale, managerial skill, and changes in the organization of production. TFP index is defined as the ratio between an Output Index (i.e. the change in production volumes over a considered period) and an Input Index (the corresponding change in inputs/factors used to produce them). Output and input indices are calculated as weighted averages of changes in produced quantities and in input quantities respectively, where the weights are represented by the production value of the various products and the expenditure for each of the four considered production factors (intermediate inputs, land, labour, capital). Depending on the type of average applied and the chosen reference period for the weights, the TFP indicator assumes different analytical forms. Laspeyres indices are defined as arithmetic means with weighting factors referring to the time 0 (base year), while Paasche indices are harmonic means with weighting factors referring to the time t (current year). In formula, the TFP Laspeyres index is given by: $$TFP_0^t\_L = \frac{O_0^t\_L}{I_0^t\_L} =$$ $$\frac{\left(\frac{q_{1t}}{q_{10}} * w_{10} + \frac{q_{2t}}{q_{20}} * w_{20} + ... + \frac{q_{nt}}{q_{n0}} * w_{n0}\right) / (w_{10} + w_{20} + ... + w_{n0})}{\left(\frac{i_{1t}}{i_{10}} * x_{10} + \frac{i_{2t}}{i_{20}} * x_{20} + ... + \frac{i_{rt}}{i_{r0}} * x_{r0}\right) / (x_{10} + x_{20} + ... + x_{r0})},$$ while TFP Paasche index is defined as: $$TFP_0^t\_P = \frac{O_0^t\_P}{I_0^t\_P} =$$

Fiches already in use under current CMEF where relevant and no major modification

$$\frac{\left(\left(\dfrac{q_{10}}{q_{1t}} * w_{1t} + \dfrac{q_{20}}{q_{2t}} * w_{2t} + ... + \dfrac{q_{n0}}{q_{nt}} * w_{nt}\right) / \left(w_{1t} + w_{2t} + ... + w_{nt}\right)\right)^{-1}}{\left(\left(\dfrac{i_{10}}{i_{1t}} * x_{1t} + \dfrac{i_{20}}{i_{2t}} * x_{2t} + ... + \dfrac{i_{r0}}{i_{rt}} * x_{rt}\right) / \left(x_{1t} + x_{2t} + ... + x_{rt}\right)\right)^{-1}} ,$$

where q_{jt} and i_{kt} are respectively the quantity of product j and factor k at time t, while w_{jt} and x_{kt} are the weights of product j and factor k within the agricultural sector.

Finally, the geometrical average of the Laspeyres and the Paasche index gives the Fischer index, which benefits from the most suitable statistical properties. In formula, the TFP Fisher index is computed as follows:

$$TFP\_F = \sqrt{TFP\_L * TFP\_P}$$

Unit of measurement	Index (3-year moving average)
Data source	The **Economic Accounts for Agriculture (EAA)** from Eurostat. The volume indices calculated by Eurostat are Laspeyres indices and changes in volume are measured using the weightings for the preceding year to guarantee the weightings are relatively up-to-date (see Reg. N° 138/2004). They correspond to the term q_{lt}/q_{l0} of the equations displayed above. Precise indicators chosen in the EAA: - Change in output volume ($q_{lt}/q_{l0)}$: Volume Indices, n-1 = 100, Production value at producer price (aact_eaa05) - Output weights: Real price in Euro, 2010 = 100, Production value at producer price (aact_eaa04) - Change in input volume ($i_{lt}/i_{l0)}$ for every input except land and labour cost: Volume Indices, n-1 = 100, Production value at basic price (aact_eaa05) - Input weights: Real price in Euro, 2010 = 100, Production value at basic price (aact_eaa04) - Volume index for labour costs: Change in Total labour input measured in 1000 AWU (aact_ali01) - Correction of the weight for labour costs to cover the family labour costs: the compensation of employees is divided by the share of paid labour also directly available from the EAA (aact_ali01) - Volume index for land costs: Change in Total UAA available in the EAA (apro_cpp_luse). Complementary data is required from: - the **Farm Structure Survey (FSS - Eurostat)** to assess the share of rented land (in order to correct the weight of land by including the own land) (ef_mptenure). - the **Agricultural Production Data – Crop Products** (**Eurostat**) for the volume index of the UAA (apro_cpp_luse). - the **Farm Accountancy Data Network** to estimate the national average depreciation rate.

Fiches already in use under current CMEF where relevant and no major modification

References/location of the data	Eurostat: EAA, APRO, ALI, FSS; FADN
Data collection level	National (NUTS 0)
Frequency	Annual
Delay	Year N-2
Comments/caveats	The climatic conditions affecting crop yields have strong impact on the crop output and as a consequence on the indicator. Therefore a moving average over 3 years is to be calculated to smooth the weather effect.
	The level of detailed information required to compile the indices (especially for the Paasche Index) does not allow for calculating long time series and complicates the calculation for the EU aggregates.
	The length of the time series varies according to MS.
	There are breaks in time series and data is missing for some years, especially in the Agricultural Production Data. The methodology to value the fixed capital consumption seems to vary over time. Concerning the labour input any change in accounting rules has been normally smoothed. Nevertheless this volume index is to be checked very carefully because the TFP indicator is very sensitive to any variation in labour input.
	The calculation of regional values is not possible due to the lack of data at such detailed geographical level.

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.29	CURRENT CMEF: C.14
Indicator Name	**Labour productivity** **in agriculture**
Definition	Labour productivity in agriculture is expressed as **total Gross Value Added (GVA) in agriculture at basic prices per Annual Work Unit (AWU).** GVA is defined as the value of output less the value of intermediate consumption. Output is valued at basic prices, GVA is valued at basic prices and intermediate consumption is valued at purchasers' prices. The basic price is defined as the price received by the producer, after deduction of all taxes on products but including all subsidies on products. GVA per AWU provides comparable data on labour productivity and allows for comparison between sub-sectors and countries. **A three-year average mitigates short-term fluctuations. Labour productivity in agriculture is then calculated as the ratio of the averages**: (three year average GVA) / (three year average labour force).
Unit of measurement	EUR/AWU
Data source	Eurostat - Economic Accounts for Agriculture (EEA) Eurostat - Agricultural Labour Input Statistics
References/location of the data	EEA for GVA values at current prices: aact_eaa01 EEA for GVA values at constant prices: aact_eaa03 Agricultural Labour Input Statistics for AWU values: aact_ali01
Data collection level	EU and national (NUTS 0)
Frequency	Annual
Delay	1 year
Comments/caveats	Due to the lack of available regional data, this indicator can only be calculated at national level.

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.29	CURRENT CMEF: C.15
Indicator Name	**Labour productivity** **in forestry**
Definition	Labour productivity in forestry is expressed **as total Gross Value Added in forestry at basic prices per Annual Work Unit (AWU).** The forestry sector corresponds to division 02 in NACE rev. 1.1 (Forestry and logging). GVA is defined as the value of output less the value of intermediate consumption. Output is valued at basic prices, GVA is valued at basic prices and intermediate consumption is valued at purchasers' prices. The basic price is defined as the price received by the producer, after deduction of all taxes on products but including all subsidies on products. GVA per AWU provides comparable data on labour productivity and allows for comparison between sub-sectors and countries. A **three-year average mitigates short-term fluctuations. Labour productivity in forestry is then calculated as the ratio of the averages**: (three-year average GVA)/(three-year average employment).
Unit of measurement	EUR/AWU
Data source	Eurostat
References/location of the data	Eurostat - Economic accounts for forestry and logging [for_eco_cp] Eurostat - Annual work units in forestry and logging [for_awu]
Data collection level	EU and national (NUTS 0)
Frequency	Annual
Delay	2-3 years
Comments/caveats	Due to the lack of available regional data this indicator can only be calculated at national level and not for all Member States.

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.29	CURRENT CMEF: C.16	
Indicator Name	**Labour productivity** **in the food industry**	
Definition	Labour productivity in the food industry is expressed as total **Gross Value Added (GVA) in the food industry per person employed.** GVA is defined as the value of output less the value of intermediate consumption. Output is valued at basic prices, GVA is valued at basic prices and intermediate consumption is valued at purchasers' prices. The food industry sector corresponds to NACE rev.2 = Manufacture of food products; beverages and tobacco products (C10+C12). **A three-year average mitigates short-term fluctuations. Labour productivity in the food industry is then calculated as the ratio of the averages**: (three-year average GVA)/(three-year average number of persons employed).	
Unit of measurement	EUR/person	
Data source	Eurostat - National Accounts Eurostat - Labour Force Survey	
References/location of the data	National Accounts: table nama_10_a64 Labour Force Survey: table lfsa_egan22d	
Data collection level	EU and national (NUTS 0)	
Frequency	Annual	
Delay	2 years	
Comments/caveats	Due to the lack of regional data, this indicator can only be calculated at national level.	

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.30	CURRENT CMEF: I.06
Indicator Name	**Agricultural imports and exports**
Definition	**Value of EU exports of agricultural goods** **Value of EU imports of agricultural goods** **Agricultural trade balance = value of EU exports of agricultural goods - value of EU imports of agricultural goods**. It indicates whether the EU has a trade surplus or deficit in agricultural products and its size. The indicator may be broken down by different agricultural products, as defined by Combined Nomenclature (CN) codes, and by different EU export/import geographical areas. The indicator is calculated by Directorate-General for Agriculture and Rural Development (DG AGRI) yearly on the basis of EUROSTAT Comext data, using the definition of agricultural products developed internally (available in the annexes of Agricultural Trade Statistics published by DG AGRI Unit B2, http://ec.europa.eu/agriculture/trade-analysis/statistics/index en.htm).
Unit of measurement	€
Data source	EUROSTAT COMEXT database (http://epp.eurostat.ec.europa.eu/statistics explained/index.php/Glossary:COMEXT)
References/location of the data	COMEXT database - declarant EU28, partner - extra-EU28, trade flow: export and import; Combined Nomenclature codes as defined in AG AGRI Agricultural Trade Statistics publication (see link above); trade regime: 4
Data collection level	Availability at MS level Indicator at EU level
Frequency	Data available monthly Indicator calculation - yearly
Delay	Year Y is available FEB Y+1
Comments/caveats	

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.31	CURRENT CMEF: C.30
Indicator Name	**Tourism infrastructure**

Definition	Tourism infrastructure in rural areas is measured as **the number of bed places in tourist accommodations in absolute values and as a share of total bed places by degree of urbanisation.**
	
	From 2012, data are collected at NUTS 2 level, according to Regulation (EU) No 692/2011 concerning European statistics on tourism and repealing Council Directive 95/57/EC.
	Under this regulation, **data are collected according to the following degrees of urbanisation:**
	
	    1. Densely-populated area (cities/large urban area)
	    2. Intermediate urbanized area (towns and suburbs/small urban area)
	    3. Thinly populated area (rural area)
	
	According to the definitions of urban areas used in Europe (in line with the United Nations Population Division (UNPD)), urban areas correspond to densely populated and intermediate density areas while rural areas equal thinly populated areas.

Unit of measurement	Total number of bed places by degree of urbanisation and % of national total
Data source	Eurostat – Tourism statistics According to Regulation (EU) 692/2011 of the European Parliament and of the Council, the data is available from 2012 onwards.
References/location of the data	For national data: table tour_cap_natd For regional data: table tour_cap_nuts2d
Data collection level	EU, national (NUTS 0) and regional (NUTS 1 and 2)
Frequency	Annual and monthly. Annual for regional data.
Delay	1 year
Comments/caveats	Collective tourist accommodation establishments include hotels, holiday and other short-stay accommodation, camping grounds, recreational vehicle parks and trailer parks (NACE r.2 divisions I551-I553). When the number of bed places in one category of establishment is missing, the sum of available data is provided. The number of bed places in an establishment or dwelling is determined by the number of persons who can stay overnight in the beds set up in the establishment (dwelling), ignoring any extra beds that may be set up by customer request. The term bed place applies to a single bed, double bed being counted as two bed places. The unit serves to measure the capacity of any type of accommodation. A bed place is also a place on a pitch or in a boat on a mooring to accommodate one person. One camping pitch should equal four bed places if the actual number of bed places is not known.

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.32	CURRENT CMEF: C.19
Indicator Name	**Agricultural area under organic farming**
Definition	The indicator shows **the number of hectares under organic farming and the share of area under organic farming in the total utilised agricultural area (UAA).** The area under organic farming is classified as follows: • fully converted to organic farming • under conversion to organic farming • total fully converted and under conversion to organic farming Farming is considered to be organic if it complies with the relevant EU legislation. The area defined refers to the Utilised agricultural area excluding kitchen garden as from the "Organic crop area by agricultural production methods and crops". It might not be strictly comparable with the definition of UAA (only area of main crops) in the crop production statistics. Data on the area under organic farming at regional level come from the FSS.
Unit of measurement	Ha and %
Data source	Eurostat – Organic farming Eurostat – Crop production
References/location of the data	Organic data: org cropar h1 until 2011, org cropar from 2012 onwards UAA: apro_cpsh1
Data collection level	EU, national (NUTS 0)
Frequency	annual.
Delay	1 year
Comments/caveats	There are differences between national and regional data because the former is collected by Eurostat and the latter is based on the Farm structure survey (FSS). Variables for table ef_mporganic: AGRAREA_HA (ha: Utilised agricultural area), A_3_2_1_HA (ha: Organic farming – certified), A_3_2_2_HA (ha: Farming system - Conversion to organic farming), A_3_2_3_HA (ha: Organic farming (incl. in conversion)).

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.33	CURRENT CMEF: C.33
Indicator Name	**Farming intensity**
Definition	This indicator consists of **2 sub-indicators**: 1. **Farm input intensity** 2. **Areas of extensive grazing** **1. Farm input intensity** is expressed as the **utilised agricultural area (UAA) managed by farms with low, medium and high input intensity, as percentage of total UAA.** The input intensity of a farm can be defined as the level of inputs used by the farm per unit of production factor (in general land). Intensification is defined as the increase in farm intensity, while extensification describes the opposite trend. Farms are classified into intensity categories according to an estimate of input volume per hectare of UAA. The inputs considered are fertilizers, pesticides, other crop protection products and purchased feed. This approach allows covering both crop and livestock productions. The volume of inputs used (per hectare) is estimated by dividing input expenditures (per hectare) by the input price index for the year and country in question. This results in input expenditures per hectare in constant national input prices. Fertiliser expenditure (purchased fertilisers and soil improvers) is divided by the fertiliser price index in the country of the same year in order to estimate the volume used. Similarly, crop protection expenditure (plant protection products, traps and baits, bird scares, anti-hail shells, frost protection) is divided by the pesticide price index in the country of the same year. Purchased feed cost is also divided by the feed price index in the country of the same year. The result is thus expressed in constant inputs prices (Euro per ha). The method allows not only to deduct inflation, but also the fluctuation of input prices. Thus it estimates the trend in the volume of inputs used per hectare. However, it does not capture differences in input prices between countries and the differences in prices within each category of inputs (for example between a pesticide A and a pesticide B). Therefore it does not give the exact volume of inputs used for a specific country and year. In a second step, each farm is classified according to its average level of input use per ha. The thresholds have been set in such a way that the UAA in the EU is equally divided into the three categories for the first year of the analysis (2004 for the EU-25). If it is higher than 350 constant EUR per ha (the threshold separating the highest from the middle category), the farm is qualified as having high intensity. When it is below 155 constant EUR per ha (the threshold separating the middle from the lowest category), it is classified as having low intensity. Otherwise, it is considered to have medium intensity. These levels do not pretend to represent any real borders of extensive and intensive farming. They are just set in a pragmatic way to study the developments in farming intensity. To properly interpret the results of this indicator, an "average level of intensity" in the country can also be calculated. Intensification in a country with very low intensity does not mean the same for the environment than intensification in a country with high intensity. That is the purpose of the variable, "average input expenditures per hectare in constant input prices". It is not the ideal measurement of intensity; however, it is the best estimate that we can obtain until now from the available data. For the calculation of this indicator, the methodology of the agri-environmental indicator 12 "intensification/extensification" is used:

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

2. Areas of extensive grazing measures the **area under grazing livestock production (cattle, sheep and goats), where the stocking density does not exceed 1 livestock unit per ha of forage area (forage crops, permanent pastures and meadows), as share of the total UAA.**

For each region (NUTS 2), the livestock density per ha of forage UAA (fodder crops + permanent grassland) is calculated. If the livestock density is less than 1 LU/ha the regions is classified as extensive; if it is more than 1 LU/ha, the regions is classified as intensive. Then the share of forage UAA in total UAA for each "extensive" NUTS 2 is calculated.

In each region the following information is needed:

- total UAA, UAA used for fodder crops and UAA for permanent grassland;

- numbers of grazing livestock (bovine by sex and age, sheep, goats);

- livestock numbers are converted into livestock units.

The conversion of the number of animals into livestock units has to be made by using the coefficients listed in Annex I of Commission Regulation (EC) No 1200/2009 (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32009R1200:EN:NOT).

Forage crops are defined as characteristic D18 (forage plants) of the Farm Structure Survey.

Since the evaluation of the extensive character of agriculture should be made at the most detailed geographical level possible, the extensive character of agriculture at Member State level is determined by aggregating values at NUTS 2 level. |
| **Unit of measurement** | 1. % of total UAA. (The variable "average level of intensity" per country or region is expressed in "Euro per ha in constant input prices").

2. ha and % of total UAA |
| **Data source** | 1. Farming intensity

- The main data source is DG AGRI - Farm Accountancy Data Network (FADN).

- Eurostat - Price indices of the means of agricultural production, input.

2. Eurostat - Farm structure survey (FSS). |
| **References/location of the data** | 1. Farming intensity

- DG AGRI - Farm Accountancy Data Network (FADN). Name of current variables defined in the FADN: SE295 Fertilizers; SE300 Crop protection; F64 to F67 Purchased feedstuffings, SE025 Utilised Agricultural Area:

http://ec.europa.eu/agriculture/rica/;

https://circabc.europa.eu/faces/jsp/extension/wai/navigation/container.jsp

- Eurostat - Price indices of the means of agricultural production, input (2010 = 100) - annual data (apripi10ina).
Products: 203000 - FERTILISERS AND SOIL IMPROVERS, 204000 - PLANT PROTECTION PRODUCTS AND PESTICIDES, 206000 - ANIMAL FEEDINGSTUFFS.

2. Areas of extensive grazing

- Eurostat - Farm structure survey (FSS), Tables: Land use: number of farms and areas of different crops by agricultural size of farm (UAA) and NUTS 2 regions [ef_oluaareg]; Livestock: number of farms and heads of animals of different types by agricultural size of farm (UAA) and NUTS 2 regions [ef_olsaareg]. |
| **Data collection** | 1. National (NUTS 0), regional (NUTS 2); primary data refer to FADN regions. |

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

level	2. National (NUTS 0), regional (NUTS 2)
Frequency	1. Annual 2. FSS: full census every 10 years, intermediate survey 2-3 times in-between.
Delay	1. 2 years 2. 2-3 years
Comments/caveats	1. Farming intensity - For more caveats and details on the methodology refer to the agri-environmental indicator 12 Intensification/Extensification http://ec.europa.eu/eurostat/statistics-explained/index.php/Agri-environmental_indicators

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR **C.34**	CURRENT CMEF: R.09_PI
Indicator Name	**Value of production under EU quality schemes** compared to total value of agricultural and food production
Definition	Value of production under the quality schemes PDO and PGI (Council Regulation (EC) No 510/2006 compared to total agricultural and food production. Value of production is measured in sales value (in EUR).
Unit of measurement	%
Data source	External study commissioned by the Commission. The 2008 study covered the years 2005, 2006, 2007 and partly 2008. The 2012 study covered the period 2005-2010. A new study is scheduled for 2016 covering the period 2011 - 2015
References/location of the data	Data (the value of production) are located in the Member States with the producers under PDO and PGI schemes.
Data collection level	Data are available at the producer's level. Their availability depends on the readiness of producer to provide them. There is no systematic data collection established EU wide but some Member States have national data collections. Indicator will be established at EU level, based on an estimation provided by a study.
Frequency	Every four years
Time lag	Approximately 2 years
Comments/caveats	Given the lack of a clear definition of quality, the EU PDO/PGI schemes were taken as a proxy for quality production. The indicator could be biased in case some producers (notably the larger ones) do not provide data. So far this is the only method to obtain data; Member States are reluctant to ensure a systematic data collection of the value of production under PDO and PGI schemes.

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.35	CURRENT CMEF: C.35
Indicator Name	**Farmland birds index (FBI)**
Definition (Exact definition in bold, description of the measurement/calcul ation, sub-indicators in bold if relevant).	The farmland bird indicator is intended as a barometer of change for the biodiversity of agricultural landscapes in Europe. The indicator is **a composite index that measures the rate of change in the relative abundance of common bird species at selected sites: trends of index of population of farmland birds (base year 2000 = 100).** These species, chosen from a list of selected common species at EU level (the so-called "EU list of species" currently cover 39 species[4]), are dependent on farmland for feeding and nesting and are not able to thrive in other habitats. The species on the list constitute a maximum, from which the countries select the species relevant to them. However, Member States can select their own species set, ideally following guidelines from the European Bird Census Council (EBCC). No rare species are included in EU species selection. Population trends are derived from the counts of individual bird species at census sites and modeled as such through time. The population counts are carried out by a network of volunteer ornithologists coordinated within national schemes. Indices are first calculated for each species independently at the national level by producing a national population index per species. Then, to produce the EU aggregate, the national species indices are combined into supranational ones. To do this, they are weighted by estimates of national population sizes. Weighting allows for the fact that different countries hold different proportions of the European population of each species. In a third step, the supranational indices for each species are then combined on a geometric scale to create a multi-species aggregate index at European level. For more detailed information on the methodology used, species, etc. please refer to the EBCC website http://www.ebcc.info/ and the Eurostat indicator metadata. The index is calculated with reference to a base year, when the index value is set at 100%. Trend values express the overall population change over a period of years. (In Eurostat's database, data are presented with four different bases: 1990, 2000, the latest year available and the national base year). Data going back to the 1980s however exist and are available at the EBCC website. The indicator already exists: - Agro-environmental indicator (AEI) 25: Population trends of farmland birds; - Sustainable development indicators (SDI) – Biodiversity: Common Birds Index (Eurostat). - SEBI indicator 01: abundance and distribution of selected species, which includes common farmland bird index (Pan-European Streamlining European Biodiversity Indicators (SEBI) initiative, European Environment Agency (EEA), Directorate-General Environment (DG ENV), etc.)
Unit of measurement	Index - (base year 2000 = 100)
Data source	EBCC/RSPB/BirdLife/Statistics Netherlands: the European Bird Census Council (EBCC) and its Pan-European Common Bird Monitoring Scheme (PECBMS), http://www.ebcc.info/pecbm.html . Data are transmitted to Eurostat and published in the statistics database: Environment/Biodiversity. Eurostat does not receive any of these data directly

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[4] 2014 update

	from the Member States.
	National indices are compiled by each country using common software and methodology. The supranational indices are compiled by the Pan-European Common Bird Monitoring scheme (PECBM), a joint project of the European Bird Census Council, the Royal Society for the protection of Birds, BirdLife International, and Statistics Netherlands.
References/location of the data	Location of the data: Eurostat, Environment statistics, Biodiversity: *Table env_bio2: Common farmland bird index.* References - EBCC/PECBMS : European Birds Census Council/ Pan-European Common Bird Monitoring Scheme http://www.ebcc.info/pecbm.html; - AEI 25 "Population trends of farmland birds", as defined in the COM (2006) 508 on "Development of agri-environmental indicators for monitoring the integration of environmental concerns into the CAP", http://epp.eurostat.ec.europa.eu/portal/page/portal/agri_environmental_indicators/introduction.
Data collection level	National and EU level aggregation (on the basis of the number of Member States which delivered data every year. E.g.: in 2008 only 15 Member States delivered data; for the 2014 EBCC/PECBMS updates data is available for 25 EU Member States, from 1990 to 2012). In the future the index could be calculated at a lower level, by bio-geographical areas (different agricultural habitats) on the basis of geo-referenced data (France already does it, but no harmonized data at EU level at the moment exist).
Frequency	Annual (In principle, these data are updated on a yearly basis at national and EU level. Ability to provide updates of indicators at national level depends on the capacity of the national data providers). Data availability in early 2015: 2008 national data, EU aggregates 2012. For a small number of Member States data are available from 1980 and cover different periods depending on data availability in each Member State. However, Eurostat considers 1990 to be the first year with sufficient geographic coverage for the EU as a whole and therefore time series should be calculated from 1990.
Delay	2-3 years)
Comments/caveats	Comparability between Member States is possible since the index gives a measure of the rate of change in the abundance of common bird species. Species may differ in each Member State because their relevance changes in different agricultural habitats and their geographical distribution is not pan-European. Northern countries generally have fewer species than southern ones. Coverage has increased from nine to twenty-two EU Member States over the period 1990 to 2010, with three more countries covered as of the reference year 2011. As for the time series, the number and type of species chosen from the selected common list by each country should remain stable over time unless solid justification is provided. If a country decides to include more species, this is often because older data have become available in electronic form. In any case, the whole time series of each country is re-calculated for each new data delivery and may therefore change over time, because the indicators are all calculated with modelling technique. There have recently been changes to the species covered and the time series for several countries. The fluctuations between model runs show that small rises or

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	falls in the indicator should not be regarded as anything real and that it is best to look only at the change between 1990 and the latest available year. It should be noted that some countries publish national bird indices based on a different selection of species than the one used for the EBCC computations, or on a different allocation of species to habitats. This approach can be used as well as long as general principles for production of national common bird indicators are applied. Time series start from 1990 (for the period 1980-1989 data are not representative at EU level), but may be earlier for the national time series.

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.39	CURRENT CMEF: C.41
Indicator Name	**Soil organic matter in arable land**
Type of indicator	**Environment**
Definition	The indicator estimates the **total organic carbon content in arable soils.**
	Soil organic carbon, the major component of soil organic matter, is extremely important in all soil processes. Organic matter in the soil is essentially derived from residual plant tissues, while microbial, fungal and animal contributions constitute a small part of its total amount. Microbes, fungi and animals decompose organic matter more or less efficiently depending on temperature, moisture and ambient soil conditions. The annual rate of loss of organic matter can vary greatly, depending on cultivation practices, the type of plant/crop cover, drainage status of the soil and weather conditions. There are two groups of factors that influence inherent organic matter content: natural factors (climate, soil parent material, land cover and/or vegetation and topography), and human-induced factors (land use, management and degradation) (de Brogniez, D., Ballabio, C., Stevens, A., Jones, R. J. A., Montanarella, L. and van Wesemael, B. (2014), A map of the topsoil organic carbon content of Europe generated by a generalized additive model. European Journal of Soil Science.)
	The indicator is expressed as an estimate of the total Soil Organic Carbon stocks in topsoil (0-20) of EU Member States.
	Also the mean Soil Organic Carbon concentration per Member State is calculated, though solely for orientation purposes since it has very limited scientific meaning given the high variability of Soil Organic Carbon concentration in different areas.
	The following indicators on soil quality also exist:
	- Agro-environmental indicator (AEI 26) Soil Quality: http://ec.europa.eu/eurostat/statistics-explained/index.php/Agri-environmental_indicator_-_soil_quality
	Methodology: The indicator is based on the map of topsoil organic carbon content at the European scale elaborated by the Joint Research Centre of the European Commission. The map is based on estimates calculated by applying digital soil mapping techniques to the first European harmonized geo-references topsoil (0-20 cm) database, which arises from the Land Use/Cover Area frame statistical Survey(LUCAS), 2009.
	LUCAS is a field survey programme to monitor changes in the management and nature of the land surface of the European Union. It is also used for the collection of soil samples and their subsequent analysis to produce updated and harmonised maps of relevant soil parameters, including topsoil organic carbon (0-20 cm). In 2009 19 969 soil samples were collected in 25 Member States (EU-27 except Bulgaria and Romania) and in 2012 ca. 2 000 soil samples in Bulgaria and Romania were added. Data for Romania and Bulgaria are still awaited.
	The map produced gives the most up-to-date general picture of topsoil organic carbon content at the European Union scale and is not intended to be a substitute for national scale or local maps that are based on more detailed spatial information. Moreover, it is important that the uncertainty associated with the predicted values is understood by the end-users and should encourage careful use and interpretation of the spatial values. The maps produced in this study will be

	freely available for download from the European Soil Data Centre website http://eusoils.jrc.ec.europa.eu/
Unit of measurement	**Total Soil Organic Carbon (SOC) in arable land:** megatonnes (Mt); **Mean SOC concentration in arable land**: g/kg.
Data source	- Joint Research Centre (JRC Ispra) – Map of Topsoil Organic Carbon Content of Europe based on Land use/cover Area frame statistical Survey (LUCAS), (current version: 2009). The map is elaborated by the European Soil Database hosted by the Joint Research Centre; - de Brogniez, D., Ballabio, C., Stevens, A., Jones, R. J. A., Montanarella, L. and van Wesemael, B. (2014), A map of the topsoil organic carbon content of Europe generated by a generalized additive model. European Journal of Soil Science. doi: 10.1111/ejss.12193; Other sources: Potential sources available at national level (studies, surveys, reports), models and estimation (e.g. AEIs).
References/location of the data	The Map of Topsoil Organic Carbon Content is available on the European Soil Datacentre hosted by the Joint Research Centre http://eusoils.jrc.ec.europa.eu/ Other sources: National studies, surveys, reports
Data collection level	National (NUTS 0), regional (NUTS 2).
Frequency	The map is regularly updated depending on the availability of new data (e.g. the current version of the map is based the 2009-2012 LUCAS soil survey results; the next survey is foreseen in 2015). LUCAS survey is in principle carried out every three years. If this frequency is maintained in future, it could be envisaged that every second or third LUCAS survey (i.e. every six to nine years) a soil module could be added to determine changes compared to the 2009-2012 baseline.
Delay	The expected delay between soil sampling and the publication of the results is about two years.
Comments/caveats	The future of LUCAS survey: the survey, or certain components of it, might be repeated as a monitoring exercise in the future. There is an on-going discussion on the future of the LUCAS survey. In principle it should be repeated every 3 years. For the long term, Eurostat is planning to integrate more and more national statistics and the general results of LUCAS. The indicator should be ideally complemented by an assessment of soil biodiversity. The agri-environmental indicator (AEI) 26 - soil quality, elaborated by the Joint Research Centre of the European Commission is not directly measurable since is based on modelling and estimations are based on different sources and parameters. It will not be updated regularly.

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.41	CURRENT CMEF: C.43
Indicator Name	**Production of renewable energy from agriculture and forestry**
Type of indicator	**Environment**
Definition	This indicator measures the **production of renewable energy from agriculture and forestry and the share of this in the total production of renewable energy** It is broken down by sector: • Production of renewable energy from agriculture • Production of renewable energy from forestry Due to data availability issues, production of renewable energy from **agriculture** covers: • Biodiesel from oilseeds crops • Ethanol from starch/sugar crops • Energy from agricultural biogas (livestock manure and energy crops, waste and residues) It does not cover: • Other renewable energy from agriculture, like heat from cereal straw etc. Part of the EU biodiesel production is based on non-domestic sources (imported vegetable oils, oilseeds), therefore an ad-hoc quantification of domestic production is not possible. In addition, the category "energy from agricultural biogas", even though it predominantly covers agricultural biogas, also contains some biogas from municipal solid waste etc. Production of renewable energy from **forestry** covers: • Purpose-grown energy crops (poplar, willow, etc.) • Woody material generated by an industrial process (wood/paper industry in particular) or provided directly by forestry and agriculture (firewood, wood chips, bark, sawdust, shavings, chips, black liquor etc.) • Wastes such as straw, rice husks, nut shells, poultry litter, crushed grape dregs etc. Production of renewable energy from agriculture: The total production of renewable energy from agriculture is the sum of biodiesel, bioethanol and biogas production, all expressed in ktoe (kilotons of oil equivalent). Primary data on biodiesel, expressed in kilotons, are converted into ktoe by applying the coefficient defined by Directive 2009/28/EC (1 tonne of biodiesel = 0.8837 tons of oil equivalent) Production of renewable energy from forestry: No calculation needed. Data on renewable energy from Wood & Wood Waste are directly available from Eurostat.
Unit of measurement	kilotonnes (1000 tonnes of oil equivalent, ktoe) and % of total production of renewable energy
Data source	EurObservER, EBB & Tallage. Eurostat - Energy statistics
References/location of the data	Renewable energy from agriculture: DG Agriculture and Rural Development estimates based on: • Data on biogas: EurObserv'ER, Biogas Barometer (variable Other biogas: decentralised agricultural plants, municipal solid waste methanisation plants, centralised plants), available on www.eurobserv-er.org • Data on biodiesel: European Biodiesel Board (EBB), website www.ebb-eu.org/stats.php

Fiches already in use under current CMEF where relevant and no major modification

	• Data on bioethanol: Tallage's report Stratégie grains, website www.strategie-grains.com Renewable energy from forestry: Eurostat – Energy Statistics TABLE ngr 107a - PRODUCT Solid biofuels (excluding charcoal) - INDIC NRG primary production Total production of renewable energy: Eurostat – Energy Statistics TABLE nrg 100a - PRODUCT renewable energies - INDIC_NRG primary production total Total energy production: Eurostat – Energy Statistics TABLE nrg 100a- PRODUCT all products - INDIC_NRG primary production
Data collection level	National (NUTS 0).
Frequency	Annual
Delay	2 years
Comments/caveats	No data available on bioethanol for Estonia, Spain, Croatia, Cyprus, Luxembourg, Malta, Portugal and Slovenia. In the data on biodiesel provided by the EBB DK and SE figures aggregated by the source and therefore were not included. The figures on biogas include data for municipal solid waste methanisation plants. Consequently, they overestimate the production of biogas from agriculture. Before 2012, no data is available on biodiesel and biogas in Croatia.

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

INDICATOR C.42	CURRENT CMEF: C.44
Indicator Name	**Energy use in agriculture, forestry and food industry**
Type of indicator	**Environment**
Definition	This indicator measures the **direct use of energy in agriculture, forestry and food processing** The indicator is expressed in various ways: in kilotons, as a share of total final energy consumption and for the direct use of energy in agriculture and forestry as kg of oil equivalent per ha of UAA and forest land. This indicator is based on Eurostat data from the joint IEA/OECD-Eurostat-UNECE questionnaires. There are some limitations of data and sources: • Although energy statistics are of high quality in general, the data on energy consumption by agriculture are of lower quality due to errors and incomplete data. • The indicator only refers to direct use of energy by agriculture. Indirect energy used in agriculture for fertilisers, pesticides, animal feed and agricultural machinery, which are produced using large amounts of energy, is not included. • Data on energy consumption by agriculture from the questionnaires include the use of energy by forestry. Though data on energy consumption by fisheries should be reported separately since 2004, many data on agriculture/forestry, even after 2004, include (part of) energy consumption by fisheries. Energy consumption by agriculture may therefore be overestimated in countries with significant forestry or fisheries sectors. • Data on food processing are taken from the category "Food and tobacco" and therefore include the NACE category "Manufacture of food products, beverages and tobacco products". Data on food processing are thus overestimated.
Unit of measurement	- total in kilotons (1000 tonnes) of oil equivalent, ktoe For agriculture and forestry: - kg of oil equivalent per ha of UAA
Data source	Eurostat.
References/location of the data	Direct use of energy in agriculture and forestry: Eurostat – Energy Statistics TABLE ngr_100a - PRODUCT all products - INDIC_NRG Agriculture/Forestry Direct use of energy in food processing: Eurostat – Energy Statistics TABLE nrg_100a - PRODUCT all products - INDIC_NRG Food and tobacco Final Energy Consumption: Eurostat – Energy Statistics TABLE nrg_100a - PRODUCT all products - INDIC_NRG Final energy consumption UAA: Eurostat TABLE apro_acs_a Crop statistics (from 2000 onwards) Forest area: Eurostat TABLE for_area - INDIC_FO Forests
Data collection level	National (NUTS 0).

Draft list of Context indicators for the PMEF

Fiches already in use under current CMEF where relevant and no major modification

Frequency	Every year for energy statistics. Every 5 years for forest area (e.g. 2010, 2015). Every year for UAA crop statistics.
Delay	2 years
Comments/caveats	Germany has not reported data on direct use of energy in agriculture/forestry.