EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR AGRICULTURE AND RURAL DEVELOPMENT

Directorate L. Economic analysis, perspectives and evaluations

RESULT INDICATORS

DRAFT – WORK IN PROGRESS

FOR DISCUSSION IN THE

EXPERT GROUP ON MONITORING AND EVALUATING THE CAP

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RESULT INDICATORS

1. ***Share of direct support in agricultural income***
2. ***Variability of farm income***
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1 Share of direct support in agricultural income

Indicator Name *Title of the indicator which will be used in implementing regulation/guidance documents*	**Share of direct support in agricultural income**
Related specific objective(s) *Identification of the specific objective(s) as defined in the CAP intervention logic*	Enhance farm income
Definition *Concise definition of the concept, including if the indicator already exists, e.g. AEI, EUROSTAT indicator. If appropriate, include the methodology/formula for establishment of the indicator*	The indicator gives the **share of direct support (coupled and de-coupled payments) in both factor income and entrepreneurial income**. The components of the indicator are: - **Direct support** which refers to decoupled and coupled payments from the EU budget. Data on financial years is considered. - **Agricultural factor income**, which represents income generated by farming activities (i.e. off-farm activities are not included), and which is used to remunerate (1) borrowed/rented production factors (capital investment, wages for salaries and rented land), and (2) its own production factors (work and/or enterprise, own capital and owned land). - **Agricultural entrepreneurial income**, which represents the income generated by farming activities only and which is used to reward (2) its own production factors (work and/or enterprise, own capital and owned land). Agricultural entrepreneurial income is often referred to as "family farm income" and can be seen as the income concept which is the closest to an indicator of standard of living of the farmers. **Value of agricultural production** **- variable inputs (fertilisers, pesticides, feed etc)** **- depreciation** **- total taxes (on products and production)** **+ total subsidies (on products and production)** **= Factor income** **- wages** **- rents** } **borrowed/rented production factors (1)** **- interest paid** **= Entrepreneurial income (family farm income)** **which includes own production factors (2)**
Unit of measurement *Unit used to record the value (e.g. ha, tonnes, €, %)*	%
Methodology/formula	The indicator is calculated by DG AGRI.

Identification of what is needed to transform data from the operation database into value for the indicator	Figures on coupled and decoupled payments per Member State are divided by figures per Member State on factor income and entrepreneurial income extracted from the Eurostat database.
Data source *Identification of existing data sources (e.g. EUROSTAT indentifying relevant data set, FADN, European Environment Agency. etc.)*	Eurostat – Economic Accounts for Agriculture EU budget data on financial years
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.*	Agricultural factor income and agricultural entrepreneurial income in current prices (million euro) are available on the Eurostat website http://epp.eurostat.ec.europa.eu/portal/page/portal/agriculture/data/database Economic Accounts for Agriculture, Table *Economic accounts for agriculture - values at real prices (aact_eaa04)* EU budget data on financial years (internal DG AGRI calculation)
Data collection level *Identification of the geographical level at which the data is available and at which level the indicator should be established*	EU and Member States
Frequency *Frequency at which the indicators is collected/calculated*	yearly
Delay *How old are the data when they become available*	Y+1
Comments/caveats *Comments concerning interpretation of the indicator for monitoring and evaluation purposes and its caveats, if appropriate*	In the calculation, payment figures from the EU budget are shifted backwards by one year when divided to figures on income, as direct payments received in a certain year correspond to entitlements from the previous year.

2 Variability of farm income

Indicator Name *Title of the indicator which will be used in implementing regulation/guidance documents*	**Variability of farm income**
Related specific objective(s) *Identification of the specific objective(s) as defined in the CAP intervention logic*	Enhance farm income
Definition *Concise definition of the concept, including if the indicator already exists, e.g. AEI, EUROSTAT indicator. If appropriate, include the methodology/formula for establishment of the indicator*	The indicator is calculated as **the percentage change between income in year N and the average income over the three previous years (N-1 to N-3).** The indicator will be calculated per Member State, type of farm and economic size according to the Commission Regulation (EC) No 1242/2008 of 8 December 2008 establishing a Community typology for agricultural holdings. For the grouping according to type of farm and economic size, the TF8 and ES6 definitions as implemented in FADN will be used. Income is measured by Gross Value Added, which is defined as the value of output less the value of intermediate consumption. Following the FADN methodology, Gross value added is calculated as total output (SE131) minus total intermediate consumption (SE275). Output is valued at market prices and intermediate consumption at purchasers' prices. Two versions of the indicator will be used: Gross Value Added per farm (GVA) and Gross Value Added per Annual Work Units (GVA/AWU), where AWU is expressed in full-time person equivalents. For more detailed information on the FADN methodology, see Annexes 1 and 2.
Unit of measurement *Unit used to record the value (e.g. ha, tonnes, €, %)*	%
Data source Identification of existing data sources (e.g. EUROSTAT indentifying relevant data set, FADN, European Environment Agency. etc.)	Farm Accountancy Data Network (FADN), DG AGRI.

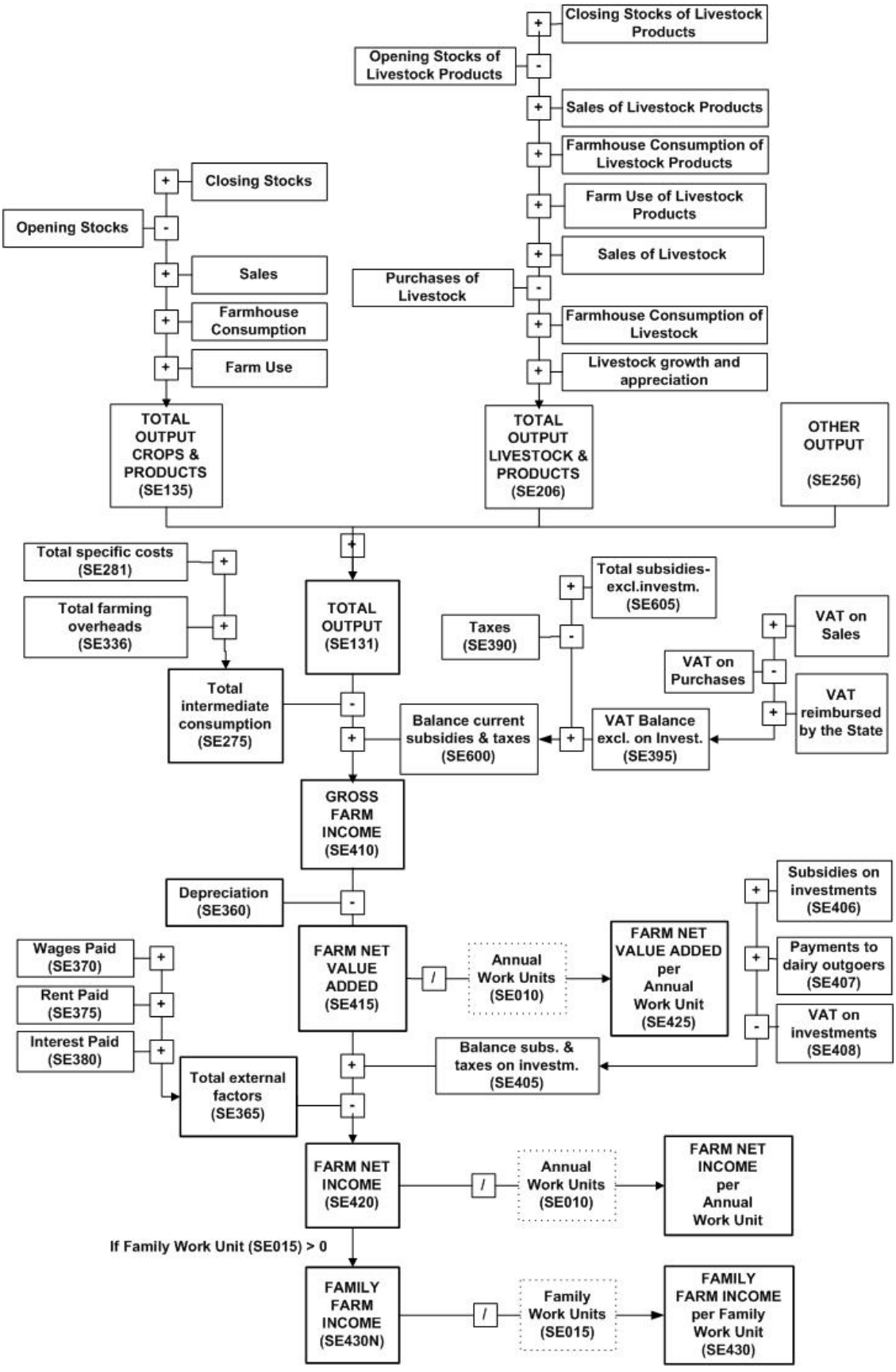
References/location of the data *Links (other references) to data sources (e.g. in EUROSTAT specifying exact tables, FAO, World bank) AEI definitions, regulations establishing indicators, etc.*	In FADN standard results: - Total output (per farm) is given by the standard variable SE131; - Total intermediate consumption is given by the standard variable SE275; - AWU is given by the standard variable SE010; - GVA is defined as SE131 - SE275; - GVA/AWU is defined as (SE131 - SE275)/SE010. Data is accessible on the following link: http://ec.europa.eu/agriculture/rica/database/database_en.cfm
Data collection level *Identification of the geographical level at which the data is available and at which level the indicator should be established*	Collection at the level of FADN Regions by Member States (the list of these regions is given in Annex 1 of the Commission Regulation (EC) 1217/2009; the Regions' reference numbers are specified in the Commission Regulation (EC) 1291/2009) Calculation of standard results at level of FADN regions and Member States is carried out by DG AGRI.
Frequency *Frequency at which the indicators is collected/calculated*	Data are collected annually
Delay *How old are the data when they become available*	Data are available with a two-year lag
Comments/caveats *Comments concerning interpretation of the indicator for monitoring and evaluation purposes and its caveats, if appropriate*	The two versions of the indicator are complementary: - GVA per AWU is better suited to compare farms' gross income between Member States as it takes into account structural differences in the average farm size; - GVA per farm is however a simpler indicator and more appropriate for comparison of income developments within Member States over time. It is important to note that: - the estimation of AWU on a farm may show some variation across Member States; - by definition, variations in GVA per farm does depend on changes in labour productivity and the total labour on the farm; - both GVA and GVA/AWU may take on negative values for a specific subset of farms – an element which must be take into account for the calculation of percentage changes (i.e. use absolute values); - similarly, when analysing changes of indicators with values close to zero, very small absolute changes of income may translate into high percentage changes.

ANNEX 1: Grouping according to type of farm (TF8) and economic size (ES6) used in FADN

TF8 Grouping	Principal type of farming
1. Fieldcrops	15. Specialist cereals, oilseeds and protein crops 16. General field cropping
2. Horticulture	21. Specialist horticulture indoor 22. Specialist horticulture outdoor 23. Other horticulture
3. Wine	35. Specialist vineyards
4. Other permanent crops	36. Specialist fruit and citrus fruit 37. Specialist olives 38. Various permanent crops combined
5. Milk	45. Specialist dairying
6. Other grazing livestock	46. Specialist cattle - rearing and fattening 47. Cattle - dairying, rearing and fattening combined 48. Sheep, goats and other grazing livestock
7. Granivores	51. Specialist pigs 52. Specialist poultry 53. Various granivores combined
8. Mixed	61. Mixed cropping 73. Mixed livestock, mainly grazing livestock 74. Mixed livestock, mainly granivores 83. Field crops - grazing livestock combined 84. Various crops and livestock combined

ES6 grouping
1. 2 000 - <8 000 EUR
2. 8 000 - <25 000 EUR
3. 25 000 - <50 000 EUR
4. 50 000 - <100 000 EUR
5. 100 000 - <500 000 EUR
6. >= 500 000 EUR

ANNEX 2: Definition of Output, Balance of subsidies and taxes, Income



Source: RICC 882, FADN.

3 Value added for primary producers in the food chain

Indicator Name *Title of the indicator which will be used in implementing regulation/guidance documents*	**Value added for primary producers in the food chain**
Related specific objective(s) *Identification of the specific objective(s) as defined in the CAP intervention logic*	Improve agricultural competitiveness
Definition *Concise definition of the concept, including if the indicator already exists, e.g. AEI, EUROSTAT indicator. If appropriate, include the methodology/formula for establishment of the indicator*	The indicator looks at **the value added of the primary production in comparison to other stages of the food chain** (mainly food manufacturing, food distribution and food service activities). Gross income from operating activities after adjusting for taxes and subsidies plus depreciation is used to calculate the value added for primary producers.
Unit of measurement *Unit used to record the value (e.g. ha, tonnes, €, %)*	Million euro at current prices
Data source Identification of existing data sources (e.g. EUROSTAT indentifying relevant data set, FADN, European Environment Agency. etc.)	Eurostat – Economic Accounts for Agriculture and Structural Business Statistics Data is available in million euro at current prices in the Eurostat publication From Farm to Fork Statistics (2011) http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-32-11-743/EN/KS-32-11-743-EN.PDF , page 15. Data is available in this publication for year 2008 for the primary producers and the other actors of the food chain concerned.
References/location of the data *Links (other references) to data*	Gross value added at current prices (million euro) for primary producers is available in Eurostat Economic Accounts for Agriculture http://epp.eurostat.ec.europa.eu/portal/page/portal/agriculture/data/database *Table Economic accounts for agriculture - values at current prices*

sources (e.g. in EUROSTAT specifying exact tables, FAO, World bank) AEI definitions, regulations establishing indicators, etc.	*(aact_eaa01)* Gross value added at factor cost in current prices (million euro) for the food industry, food trade (retail and wholesale) as well as food services can be found in the Eurostat Structural Business Statistics: http://epp.eurostat.ec.europa.eu/portal/page/portal/european_business/data/database *Table Annual detailed enterprise statistics for industry (NACE Rev.2 B-E) (sbs_na_ind_r2), Table Annual detailed enterprise statistics for trade (NACE Rev.2 G) (sbs_na_dt_r2)* and *Table Annual detailed enterprise statistics for services (NACE Rev.2 H-N and S95) (sbs_na_1a_se_r2)*
Data collection level *Identification of the geographical level at which the data is available and at which level the indicator should be established*	EU 27 and Member State
Frequency *Frequency at which the indicators is collected/calculated*	Yearly for the Economic Accounts for Agriculture Every 18 months for the Structural Business Statistics
Delay *How old are the data when they become available*	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 *Comments concerning interpretation of the indicator for monitoring and evaluation purposes and its caveats, if appropriate*	

4 EU agricultural exports

Indicator Name *Title of the indicator which will be used in implementing regulation/guidance documents*	**EU agricultural exports**
Related specific objective(s) *Identification of the specific objective(s) as defined in the CAP intervention logic*	Improve agricultural competitiveness
Definition *Concise definition of the concept, including if the indicator already exists, e.g. AEI, EUROSTAT indicator. If appropriate, include the methodology/formula for establishment of the indicator*	The indicator will consist of two sub-indicators: **1. Share of EU agricultural exports in world exports** Share of EU agricultural exports in world exports = value of EU exports of agricultural goods/value of total world exports of agricultural goods. This may be broken down by different agricultural products, as defined by CN codes, and by different EU export/import geographical areas. **2. Share of final (consumer-oriented) products in EU agricultural exports** Share of final (consumer-oriented) products in EU agricultural exports = value of EU exports of final (consumer-oriented) agricultural products/value of EU exports of all agricultural products. The indicator is calculated by DG AGRI yearly on the basis of EUROSTAT Comext and UN Comtrade databases, using the definition of agricultural products developed internally (available in Agricultural Trade Statistics published by DG AGRI L2, http://ec.europa.eu/agriculture/statistics/trade/)
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, FADN,*	EUROSTAT COMEXT database (http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:COMEXT) UN COMTRADE http://comtrade.un.org/

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.*	COMEXT database – declarant EU27, partner – extra-EU27, trade flow: export; Combined Nomenclature codes as defined in AG AGRI Agricultural Trade Statistics publication (see link above); trade regime: 4. COMTRADE database – declarant: world, partner: world , trade flow: export; Combined Nomenclature codes as defined in AG AGRI Agricultural Trade Statistics publication (see link above); trade regime: 4.
Data collection level *Identification of the geographical level at which the data is available and at which level the indicator should be established*	Data for every MS is available Indicator at EU level
Frequency *Frequency at which the indicators is collected/calculated*	Data is available monthly for COMEXT and annually for COMTRADE Indicator is calculated yearly
Delay *How old are the data when they become available*	Indicator for year Y can be calculated in Q1 of Y+2 (due to availability of COMTRADE data) For Comext: year Y is available in the second month Y+1 For Comtrade: Year Y is available in Q1 of Y+2
Comments/caveats *Comments concerning interpretation of the indicator for monitoring and evaluation purposes and its caveats, if appropriate*	Comments suggested additional separate indicators for commodity, intermediate and final goods, such information is produced by the Commission and publicly available. Also comments that distortive impact on world prices is not taken into account – this indicator is not based on world prices but customs valuation. Other indicators on price evolution and export refunds may be more relevant.

5 Public intervention

Indicator Name *Title of the indicator which will be used in implementing regulation/guidance documents*	**Public intervention**
Related specific objective(s) *Identification of the specific objective(s) as defined in the CAP intervention logic*	Maintain market stability
Definition *Concise definition of the concept, including if the indicator already exists, e.g. AEI, EUROSTAT indicator. If appropriate, include the methodology/formula for establishment of the indicator*	**Ratio of volume of the products bought in the intervention storage and the total EU production of those respective products**. The indicator will consist of sub-indicators providing this ratio for the individual products eligible for public intervention. Eligible products for intervention: cereals (common wheat, barley and maize), paddy rice, fresh or chilled meat of the beef and veal sector (falling within CN codes 0201 10 00 and 0201 20 20 to 0201 20 50), butter (produced directly and exclusively from pasteurised cream in an approved undertaking of the Community of a minimum butterfat content, by weight, of 82 % and a maximum water content, by weight, of 16 %), skimmed milk powder of top quality made from milk in an approved undertaking in the Community by the spray process, with a minimum protein-content of 34,0 % by weight of the fat free dry matter). (Art. 10 of Regulation 1234/2007; Art. 10 of COM(2011) 626)
Unit of measurement *Unit used to record the value (e.g. ha, tonnes, €, %)*	% (metric tonnes / metric tonnes)
Data source *Identification of existing data sources (e.g. EUROSTAT identifying relevant data set, FADN, European Environmental Agency, etc.)*	Member States notifications to DG AGRI (Unit D.2) Estimates of EU production (Outlook Groups, Units C.4, C.5, L.2) Eurostat data on final EU production for respective products According to the currently applicable regulation (Regulation 1272/2009), quantities in public storage are notified by the Member States to the Commission every week for cereals and rice (article 56) and every month for beef meat, butter and skimmed milk powder (article 57)
References/location of the data *Links (other references) to data sources (e.g. in EUROSTAT specifying exact*	Follow-up files, Unit AGRI-D.2, for volumes of public storage Outlook reports (+/- quarterly), for estimates of EU production Eurostat statistics on production data under Agricultural Products database (apro)

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*	Per Member State and total for the EU, for volumes of public storage Total EU, for EU production
Frequency *Frequency at which the indicators is collected/calculated*	Weekly for cereals and rice, monthly for beef meat, butter and skimmed milk powder for the data collection +/- quarterly for Outlook estimates of EU production The individual sub-indicators per product eligible for public intervention will be established annually.
Delay *How old are the data when they become available*	At most one month for volumes, quarterly for calculation of ratio
Comments/caveats *Comments concerning interpretation of the indicator for monitoring and evaluation purposes and its caveats, if appropriate*	

6 Private storage

Indicator Name *Title of the indicator which will be used in implementing regulation/guidance documents*	**Private storage**
Related specific objective(s) *Identification of the specific objective(s) as defined in the CAP intervention logic*	Maintain market stability
Definition *Concise definition of the concept, including if the indicator already exists, e.g. AEI, EUROSTAT indicator. If appropriate, include the methodology/formula for establishment of the indicator*	**Ratio of volume of the products placed into the publicly aided private storage and the total EU production of those respective products**. The indicator will consist of sub-indicators providing this ratio for the individual products eligible for private storage. Eligible products: butter (unsalted and salted), white sugar, olive oil, beef meat, pigmeat, sheepmeat and goatmeat, SMP (Art. 28 and 31 of Regulation 1234/2007; Art.16 of COM(2011)626).
Unit of measurement *Unit used to record the value (e.g. ha, tonnes, €, %)*	% (hectolitres / hectolitres or metric tonnes / metric tonnes)
Data source *Identification of existing data sources (e.g. EUROSTAT identifying relevant data set, FADN, European Environmental Agency, etc.)*	Member States notifications to DG AGRI (Unit D.2) Estimates of EU production (Outlook Groups, AGRI Units C.2, C.4, C.5, L.2) Eurostat data on final EU production for respective products According to the currently applicable regulation (Regulation 826/2008), quantities placed into and leaving aided private storage are notified by the Member States to the Commission every month (article 35, paragraph 1, point b)
References/location of the data *Links (other references) to data sources (e.g. in EUROSTAT specifying exact tables, FAO, World*	Follow-up files, Unit AGRI-D.2, for volumes of aided private storage Outlook reports (+/- quarterly), for estimates of EU production Eurostat statistics on production data under Agricultural Products database (apro)

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*	Per Member State and total for the EU, for volumes of aided private storage – Total EU, for EU production Eurostat data on final EU production for respective products
Frequency *Frequency at which the indicators is collected/calculated*	Monthly +/- quarterly for Outlook estimates of EU production The individual sub-indicators per product eligible for private storage will be established annually.
Delay *How old are the data when they become available*	At most one month for volumes, quarterly for calculation of ratio
Comments/caveats *Comments concerning interpretation of the indicator for monitoring and evaluation purposes and its caveats, if appropriate*	

7 Export refunds

Indicator Name *Title of the indicator which will be used in implementing regulation/guidance documents*	**Export refunds**
Related specific objective(s) *Identification of the specific objective(s) as defined in the CAP intervention logic*	Maintain market stability
Definition *Concise definition of the concept, including if the indicator already exists, e.g. AEI, EUROSTAT indicator. If appropriate, include the methodology/formula for establishment of the indicator*	**Ratio of the volume of the products exported with export refunds and the total EU production per given period**. The indicator will consist of sub-indicators providing the ratio for individual products eligible for export refunds, and to the extent that refunds are differentiated by destination. Eligible products: cereals, rice, sugar, beef and veal, milk and milk products, pigmeat, eggs, poultry meat, and a series of products processed from the above-mentioned. Under the applicable regulation (Regulation (EU) n° 612/2009) according to article 4, entitlement to the refund shall be conditional upon the presentation of an export licence with advance fixing of the refund (except for small quantities). Therefore, the volumes of products exported with refunds can be followed up via the export licences issued by the Member States. Sectoral regulations provide for the modalities of notification by the Member States to DG AGRI on the issued export licences.
Unit of measurement *Unit used to record the value (e.g. ha, tonnes, €, %)*	Heads for live animals, units for eggs, metric tonnes for other products
Data source *Identification of existing data sources (e.g. EUROSTAT identifying relevant data set, FADN, European Environmental Agency, etc.)*	Member States notifications to DG AGRI (Unit D.2) Eurostat data on final production for respective products
References/location of the data *Links (other references) to data sources (e.g. in EUROSTAT specifying exact*	Follow-up files, Unit AGRI-D.2 Eurostat statistics on production data under Agricultural Products database (apro)

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*	Per Member State and total for the EU, usually cumulated since the beginning of the marketing year. Licences being valid throughout the EU, the Member State of issue is not reliable information as regards the origin of the exported product. Therefore, this indicator should be calculated at EU level.
Frequency *Frequency at which the indicators is collected/calculated*	Notifications on refunds: daily, weekly, monthly, depending on the product. Synthesis: weekly or monthly. The cumulated sub-indicators per product eligible for export refunds will be established yearly.
Delay *How old are the data when they become available*	At most one month for export licences
Comments/caveats *Comments concerning interpretation of the indicator for monitoring and evaluation purposes and its caveats, if appropriate*	

8 EU commodity prices compared to world prices

Indicator Name *Title of the indicator which will be used in implementing regulation/guidance documents*	**EU commodity prices compared to world prices**
Related specific objective(s) *Identification of the specific objective(s) as defined in the CAP intervention logic*	Improve agricultural competitiveness [Maintain market stability]
Definition *Concise definition of the concept, including if the indicator already exists, e.g. AEI, EUROSTAT indicator. If appropriate, include the methodology/formula for establishment of the indicator*	Comparison between the EU and world prices of the following agricultural commodities: - Soft wheat - Maize - Barley - Sugar - Butter - SMP - WMP - Cheese - Beef meat - Pork meat - Poultry meat - Eggs
Unit of measurement *Unit used to record the value (e.g. ha, tonnes, €, %)*	Index and rates of change (%)
Methodology/formula *Identification of what is needed to transform data from the operation database into value for the indicator*	Absolute price data extracted as such from the databases Calculation of indices and rates of changes (monthly and annual)
Data source Identification of existing data sources (e.g. EUROSTAT indentifying relevant data set, FADN, European Environment Agency. etc.)	EU - Agriview (monthly prices) World - FAOSTAT, World Bank (Pink Sheet)

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.*	The comparison between EU and international prices (price dashboard) is available at: http://ec.europa.eu/agriculture/analysis/markets/foodprices/food06_2012_en.pdf EU prices from AGRIVIEW: as recorded in http://ec.europa.eu/agriculture/markets/prices/monthly_en.pdf Product codes: BLTPAN (Breadmaking common wheat), MAI (Feed maize), ORGFOUR (Feed barley), LAI 249 (SMP),LAI 254 (Butter), LAI 259 (Cheddar), C R3 (Bœufs) or A R3 (Young bovines), POULET ALL (Poultry), REGULATED (Pork, 0203 2 E) World prices: • Commodity Price Data (Pink Sheet), available at http://go.worldbank.org/2O4NGVQC00 - Wheat (US), no. 2, soft red winter, export price delivered at the US Gulf port for prompt or 30 days shipment - Maize (US), no. 2, yellow, f.o.b. US Gulf ports - Barley (Canada), feed, Western No. 1, Winnipeg Commodity Exchange, spot, wholesale farmers' price - Beef meat (Australia/New Zealand), chucks and cow forequarters, frozen boneless, 85% chemical lean, c.i.f. U.S. port (East Coast), ex-dock, beginning November 2002; previously cow forequarters (or alternatively Brazilian price) - Meat, chicken (US), broiler/fryer, whole birds, 2-1/2 to 3 pounds, USDA grade "A", ice-packed, Georgia Dock preliminary weighted average, wholesale • FAO compilation of average of mid-point of price ranges reported bi-weekly by Dairy Market News (USDA). Available at http://www.fao.org/es/esc/prices/PricesServlet.jsp?lang=en - Butter, Oceania, indicative export prices, f.o.b. ; - Cheddar Cheese, Oceania, indicative export prices, f.o.b.; - Skim Milk Powder, Oceania, indicative export prices, f.o.b.; - Whole Milk Powder, Oceania, indicative export prices, f.o.b. • Other international sources: - Pork (US) carcass lean hogs US Iowa Minnesota (167-187 lb) at www.feedstuffs.com - Beef (Brazil) at www.pecuaria.com.br or Argentina (Ministry of Agriculture, www.oncca.gov.ar) - Poultry (Brazil – IEA Sao Paolo, www.iea.sp.gov.br/out/ivarpre.php) or US (www.feedstuffs.com) - Eggs (US) from USDA http://www.usda.gov/wps/portal/usda/usdahome
Data collection level *Identification of the geographical level at which the data is*	Collection at EU level (MS level available in some cases) Calculation at EU level

available and at which level the indicator should be established	
Frequency *Frequency at which the indicators is collected/calculated*	Monthly
Delay *How old are the data when they become available*	1 month
Comments/caveats *Comments concerning interpretation of the indicator for monitoring and evaluation purposes and its caveats, if appropriate*	EU and world prices should be comparable

9 Value of production under EU quality schemes

Indicator Name *Title of the indicator which will be used in implementing regulation/guidance documents*	**Value of production under EU quality schemes**
Related specific objective(s) *Identification of the specific objective(s) as defined in the CAP intervention logic*	Meet consumer expectations
Definition *Concise definition of the concept, including if the indicator already exists, e.g. AEI, EUROSTAT indicator. If appropriate, include the methodology/formula for establishment of the indicator*	Value of production under the quality schemes PDO and PGI (Council Regulation (EC) No 510/2006 of 20 March 2006 on the protection of geographical indications and designations of origin for agricultural products and foodstuffs) compared to total agricultural and food production. Value of production is measured in sales value (in EUR).
Unit of measurement *Unit used to record the value (e.g. ha, tonnes, €, %)*	%
Data source Identification of existing data sources (e.g. EUROSTAT indentifying relevant data set, FADN, European Environment Agency. etc.)	External study commissioned by the European Commission. The 2008 study covered the years 2005, 2006, 2007 and partly 2008. The ongoing 2012 study will update the existing data and will cover the period 2005-2010.
References/location of the data *Links (other references) to data*	Data (the value of production) are located in the Member States with the producers under PDO and PGI schemes.

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*	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 *Frequency at which the indicators is collected/calculated*	Every four years
Delay *How old are the data when they become available*	Approximately 2 years
Comments/caveats *Comments concerning interpretation of the indicator for monitoring and evaluation purposes and its caveats, if appropriate*	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 that some producers (and notably the bigger 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.

10 Importance of organic farming

Indicator Name *Title of the indicator which will be used in implementing regulation/guidance documents*	**Importance of organic farming**
Related specific objective(s) *Identification of the specific objective(s) as defined in the CAP intervention logic*	Meet consumer expectations [Provide environmental public goods] [Climate change mitigation and adaptation] [Foster innovation]
Definition *Concise definition of the concept, including if the indicator already exists, e.g. AEI, EUROSTAT indicator. If appropriate, include the methodology/formula for establishment of the indicator*	The indicators will consist of two sub-indicators: 1. **Share of organic area in total UAA**: • percentage of total UAA under organic crop management (fully converted and under conversion) **2. Share of organic livestock in total livestock** • Percentage of animals (in different categories) under organic management Farming is considered to be organic if it complies with Council Regulation (EC) No 834/2007 of 28 June 2007 (OJ No L 189/2007) on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91.
Unit of measurement *Unit used to record the value (e.g. ha, tonnes, €, %)*	%
Data source Identification of existing data sources (e.g. EUROSTAT indentifying relevant data set, FADN, European Environment Agency. etc.)	Eurostat <u>Main data source:</u> • Organic farming statistics (org): - Annual data collection - National level - Indicator for share of crop area in total UAA already calculated and available; livestock indicator requires calculations - Not fully complete data set <u>Potential alternative/additional data source:</u> • Structure of agricultural holdings (ef): - Data collection every 3-4 years - Breakdown possible at NUTS 2 or NUTS 3 (in census years) level

	- Requires calculations - Complete data set - Organic farming may be deleted from this survey in the future
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.*	**1. Share of organic area in total UAA:** Table: food_in_porg1 Variable: PCT_ORG_UAA (Share of total organic crop area out of total Utilised Agricultural Area (%)) **2. Share of organic livestock in total livestock:** Tables: • food_in_porg3 for the number of animals of different categories produced organically • apro_mt_lscatl for annual data of cattle population • apro_mt_lsgoat for annual data of goat population • apro_mt_lsequi for annual data of equidae population • apro_mt_lssheep for annual data of sheep population • apro_mt_lspig for annual data of pig population For this subindicator, the share of organic in total production is not calculated by Eurostat but can be calculated by comparing the number of animals reared organically with the total animal population
Data collection level *Identification of the geographical level at which the data is available and at which level the indicator should be established*	**1. Share of organic area in total UAA:** - Readily available at national level in Eurostat database - Likely to be available at lower levels in the Member States - Alternatively, the indicator can be calculated at lower geographical levels from FSS data, but only at certain time intervals (3-4 years) **2. Share of organic livestock in total livestock:** - Data on the number of livestock reared under organic production methods are available at national level in the Eurostat database and are likely to be available at lower levels in the Member States - Data on total livestock population by animal type can be broken down at NUTS 2 level (NUTS 1 for Germany and the UK) - Alternatively, the indicator can be calculated at lower geographical levels from FSS data, but only at certain time intervals (3-4 years)
Frequency *Frequency at which the indicators is collected/calculated*	Annually for non-FSS data Every 3-4 years for FSS data
Delay *How old are the data when they become available*	2 years (in August 2012 we have data for 2010)
Comments/caveats *Comments concerning interpretation of the indicator for*	The value of this indicator should be seen in comparison to other years or other countries. For example, a country could have a share of organic farming of 5%, which sounds small but could be twice as much as in the year before, or three times as much as in the neighbouring country.

monitoring and evaluation purposes and its caveats, if appropriate	It is possible that no more organic data will be collected through the FSS in the future (after 2013). In that case, only the data collected under Regulation (EC) No. 834/2007 will remain available (national level). While data on organic crop area are not always available for all products, the main product categories are well reported. It is thus possible to illustrate the area under organic cultivation at national level, and over the whole EU-27, including the share or organic area in the total UAA in each country and at EU level. Data on organic livestock are reasonably well reported for the period from 2005 onwards, except for Germany and Malta, where no data are available. There is no complete data set on value of production, sales or household expenditure on organic products.

11 Crop diversity

Indicator Name *Title of the indicator which will be used in implementing regulation/guidance documents*	**Crop diversity**
Related specific objective(s) *Identification of the specific objective(s) as defined in the CAP intervention logic*	Provide environmental public goods [climate change mitigation and adaptation]
Definition *Concise definition of the concept, including if the indicator already exists, e.g. AEI, EUROSTAT indicator. If appropriate, include the methodology/formula for establishment of the indicator*	This indicator comprises two sub-indicators: **a) Crop diversity on farm:** average number of crops grown on a holding (by NUTS 2) or share of holdings with more than x crops (also by NUTS 2); **b) Crop diversity at regional level**: share of different crop types in a NUTS 2. This indicator would show changes in the overall crop mix in a NUTS 2. In addition, regional crop diversity could be measured by the Herfindahl index (also known as Herfindahl–Hirschman Index, or HHI), which is a measure of the size of components in relation to the totality and an indicator of the amount of competition among them. It is the most frequently used index for measuring concentration. Formula: $H := \sum_{i=1}^{N} a_i^2$ where $a_i := \frac{x_i}{\sum_{j=1}^{N} x_j}$ To measure crop diversity in a specific region, the share of crops in percent relating to the arable land has to be calculated. A high HHI signifies that the diversity is low (a value of 1 signifies a monopoly), while a low HHI signifies that the diversity is high.
Unit of measurement *Unit used to record the value (e.g. ha, tonnes, €, %)*	Number; %
Data source Identification of existing data sources (e.g. EUROSTAT indentifying relevant data set, FADN, European	Sub-indicator a: Eurostat - Farm Structure Survey Example: Galicia, ES, 2010 **No of holdings** **1 crop** **2 crops** **3 crops** **> 3 crops** Total **Total** <3 ha 52% 26% 15% 7% 100% >=3 10% 34% 32% 25% 100% **Total** **47%** **27%** **17%** **9%** 100%

Environment Agency. etc.)	Galicia, ES, 2010 **UAA** **1 crop** **2 crops** **3 crops** **> 3 crops** Total **Total** <3 ha 59% 24% 11% 5% 100% >=3 9% 35% 32% 24% 100% **Total** **44%** **28%** **18%** **11%** 100% The use of clearance of accounts data is being explored; this would only cover crop diversity in farms receiving direct payments and subject to greening; see also output indicator 2 - greening. Sub-indicator b: Eurostat – regional agriculture statistics (annual) or FSS (every 3-4 years)
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.*	Sub-indicator a: special request to Eurostat for extraction from Eurofarm database Sub-indicator b: annual land use data for NUTS 2 are available from the regional agricultural statistics (table agr_r_landuse). A more detailed breakdown of land use by different types of crops can be obtained from the FSS (e.g., types of cereals, root crops, pulses) but at longer intervals. Data from FSS can be linked to other structural information.
Data collection level *Identification of the geographical level at which the data is available and at which level the indicator should be established*	NUTS 2
Frequency *Frequency at which the indicators is collected/calculated*	FSS – every 3-4 years Regional land use statistics – annual
Delay *How old are the data when they become available*	FSS – 2-3 years Regional land use statistics – 2 years
Comments/caveats *Comments concerning interpretation of the indicator for monitoring and evaluation purposes and its caveats, if appropriate*	The overall crop mix in a NUTS 2 is to a large extent determined by economic (market), climate and institutional conditions. The CAP proposal only requires farmers to grow at least three crops, which can be fulfilled by all farmers growing the same three crops. Thus, the policy does not necessarily have an impact on regional crop diversity.

12 Share of grassland in agricultural land

Indicator Name *Title of the indicator which will be used in implementing regulation/guidance documents*	**Share of grassland in agricultural land**
Related specific objective(s) *Identification of the specific objective(s) as defined in the CAP intervention logic*	Provide environmental public goods
Definition *Concise definition of the concept, including if the indicator already exists, e.g. AEI, EUROSTAT indicator. If appropriate, include the methodology/formula for establishment of the indicator*	**Share of (permanent) grassland in total UAA**
Unit of measurement *Unit used to record the value (e.g. ha, tonnes, €, %)*	%
Data source Identification of existing data sources (e.g. EUROSTAT indentifying relevant data set, FADN, European Environment Agency. etc.)	Eurostat - Farm Structure Survey The use of clearance of accounts data is also being explored; this would however limit data to agricultural land receiving direct payments and subject to greening (see also output indicator 2 – greening).
References/location of the data *Links (other*	Table ef_lu_ovcropaa

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*	NUTS 2 for sample survey years NUTS 3 for census years
Frequency *Frequency at which the indicators is collected/calculated*	Every 3-4 years (FSS rhythm)
Delay *How old are the data when they become available*	2-3 years
Comments/caveats *Comments concerning interpretation of the indicator for monitoring and evaluation purposes and its caveats, if appropriate*	In the current CMEF, there is a related indicator which is well defined and regularly updated: Context 3, agricultural land use (see http://ec.europa.eu/agriculture/statistics/indicators/rd-2011/c3_en.pdf)

13 Share of EFA in agricultural land

Indicator Name *Title of the indicator which will be used in implementing regulation/guidance documents*	**Share of EFA in agricultural land**
Related specific objective(s) *Identification of the specific objective(s) as defined in the CAP intervention logic*	Provide environmental public goods
Definition *Concise definition of the concept, including if the indicator already exists, e.g. AEI, EUROSTAT indicator. If appropriate, include the methodology/formula for establishment of the indicator*	**Share of different types of EFA in total UAA**
Unit of measurement *Unit used to record the value (e.g. ha, tonnes, €, %)*	%
Data source Identification of existing data sources (e.g. EUROSTAT indentifying relevant data set, FADN, European Environment Agency. etc.)	Eurostat - Farm Structure Survey The use of clearance of accounts data is also being explored; this would however limit data to agricultural land receiving direct payments and subject to greening (see also output indicator 2 – greening).
References/location of the data *Links (other references) to data sources (e.g. in*	Table ef_lu_ovcropaa

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*	NUTS 2 for sample survey years NUTS 3 for census years
Frequency *Frequency at which the indicators is collected/calculated*	Every 3-4 years (FSS rhythm)
Delay *How old are the data when they become available*	2-3 years
Comments/caveats *Comments concerning interpretation of the indicator for monitoring and evaluation purposes and its caveats, if appropriate*	In the current CMEF, there is a related indicator which is well defined and regularly updated: Context 3, agricultural land use (see http://ec.europa.eu/agriculture/statistics/indicators/rd-2011/c3_en.pdf)

14 Net greenhouse gas emissions from agricultural soils

Indicator Name *Title of the indicator which will be used in implementing regulation/guidance documents*	**Net greenhouse gas (GHG) emissions from agricultural soils**
Related specific objective(s) *Identification of the specific objective(s) as defined in the CAP intervention logic*	Provide environmental public goods and pursue climate change mitigation (reduction of emissions) and adaptation (prevention of and coping with impacts of climatic changes).
Definition *Concise definition of the concept, including if the indicator already exists, e.g. AEI, EUROSTAT indicator. If appropriate, include the methodology/formula for establishment of the indicator*	**Aggregated annual emissions and removals of carbon dioxide (CO_2), and emissions of methane (CH_4) and nitrous oxide (N_2O) from agricultural soils (grassland and cropland),** reported by MS under the 'Land Use, Land Use Change and Forestry' (LULUCF) inventory to UNFCCC.
Unit of measurement *Unit used to record the value (e.g. ha, tonnes, €, %)*	Absolute net GHG emissions are reported in tonnes CO_2 equivalents. Relative net emissions are reported as a percentage of the net emissions in the reference year 1990. All GHGs are accounted on the basis of their global warming potentials (GWP) over a 100 year time period. GWP values are taken from IPCC (2007): CO_2 = 1; CH_4 = 25; N_2O = 298.
Data source Identification of existing data sources (e.g. EUROSTAT indentifying relevant data set, FADN, European Environment Agency. etc.)	Annual official data submitted by MS to the United Nations Framework Convention on Climate Change (UNFCCC), and the EU Monitoring Mechanism (managed and compiled by the EEA/EIONET). MS calculate sectoral emissions using standard methodologies (2006 IPCC guidelines) and according to a common reporting framework (CRF) agreed worldwide.
References/location of the data *Links (other references) to data sources (e.g. in EUROSTAT specifying exact*	CO_2 emissions from agricultural soils are recorded in table EU27_SRT5.xls of Annex-2.9-crf-tables-lulucf_EU27.zip (compiled each year by the EEA), which includes Standard reporting table (SRT) for sector 5 (LULUCF). Categories 5.A.B (cropland) and 5.A.C (grassland) are included in the indicator. These account for emissions of cropland/grassland remaining the same type of land use, and emissions from land converted to

tables, FAO, World bank) AEI definitions, regulations establishing indicators, etc.	cropland/grassland. The web-based tool EEA GHG viewer provides access and analysis of the data contained in the Annual EU's GHG inventories since 1990. The EEA GHG data viewer can show emission trends for the main sectors/categories and allows for comparisons of emissions between different countries and activities. This data set can be consulted at : http://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer
Data collection level *Identification of the geographical level at which the data is available and at which level the indicator should be established*	Member State
Frequency *Frequency at which the indicators is collected/calculated*	Data collected annually
Delay *How old are the data when they become available*	Year Y in June Y+2 (for instance GHG emissions data of 2010 are provided in summer 2012)
Comments/caveats *Comments concerning interpretation of the indicator for monitoring and evaluation purposes and its caveats, if appropriate*	IPCC guidance allows MS to report GHG emissions and removals from agricultural soils (LULUCF) according to different level of tiers. Tier 1 is based on the use of activity data (e.g. agricultural production statistics) and global emission factors. Tier 2 follows the same approach but applies nationally defined emission factors. Tier 3 involves the use of models and higher order inventory data tailored to the national circumstances. Methodologies for GHG emission estimates are thus not harmonised within the EU. In particular when using low tier level, GHG emission estimates do not necessarily mirror the effects of all mitigation measures that are supported by the CAP. This would require a higher level of stratification of activity data, and corresponding information on emission factors, which often is not available. As a result, GHG emission estimates have a high level of uncertainty. Comments in relation to MS' observations: This indicator only covers agricultural soils, and not agricultural non-CO2 GHG emissions as first pillar instruments have an impact only on soil related emissions (greening measures, and GAEC). Emission inventories will be identical to UNFCCC reporting, so no new reporting burden on MS. This reporting is already done on an annual basis. Any indicator has to be interpreted and cannot be seen in isolation. This means that the GHG indicator has to be interpreted in relation to agricultural output. We agree to the UK concern that the reduction of agricultural production would not be desirable although it would yield a reduction of GHG emissions within the EU. Leakage (i.e. increases of emission outside the EU) is not included. MS are encouraged to improve GHG inventories towards higher tier levels, which would allow demonstrating the effects of technological improvements.

15 Structural diversity

Indicator Name *Title of the indicator which will be used in implementing regulation/guidance documents*	**Structural diversity**
Related specific objective(s) *Identification of the specific objective(s) as defined in the CAP intervention logic*	Maintain diverse agriculture
Definition *Concise definition of the concept, including if the indicator already exists, e.g. AEI, EUROSTAT indicator. If appropriate, include the methodology/formula for establishment of the indicator*	Structural diversity can be described in various ways: 1. in <u>absolute terms</u>, by reporting for each Member State: – total number of farms, – total ha of UAA, – total LSU of holdings with livestock, – total AWU – total Standard Output i.e. the average monetary value of the agricultural output at farm-gate prices 2. in <u>relative terms</u>, by calculating : – distribution of holdings according to their size in ha of UAA – distribution of holdings according to their economic size (measured by their Standard Output (SO)) – distribution of holdings according to their specialisation / farm type
Unit of measurement *Unit used to record the value (e.g. ha, tonnes, €, %)*	1. numbers (of farms, of ha UAA, of AWU) 2. shares – % of holdings in different UAA classes – % of holdings in different SO classes – % of holdings in different farm type classes N.B.: shares will have to be calculated based on absolute values provided by Eurostat The use of a composite index is currently also being explored.
Data source Identification of existing data sources (e.g. EUROSTAT indentifying relevant data set, FADN, European Environment Agency. etc.)	Eurostat – Farm Structure Survey

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.*	1. Table ef_kvaareg 2. – Table ef_kvaareg – Table ef_kvecsleg – Table ef_kvftreg In the current CMEF, the context-related baseline indicator 4 (farm structure) describes farm structures by looking at the total number of farms, ha of UAA and AWU in each EU Member State. It also presents the distribution of farms according to their physical (in UAA) and economic (in ESU) size (see http://ec.europa.eu/agriculture/statistics/indicators/rd-2011/c4_en.pdf)
Data collection level *Identification of the geographical level at which the data is available and at which level the indicator should be established*	NUTS 2 for sample survey years (directly available from the Eurostat website) NUTS 3 for census years (upon special request to Eurostat)
Frequency *Frequency at which the indicators is collected/calculated*	Every 3-4 years (FSS rhythm)
Delay *How old are the data when they become available*	2-3 years
Comments/caveats *Comments concerning interpretation of the indicator for monitoring and evaluation purposes and its caveats, if appropriate*	The standard output is used in the FSS 2010 for the first time, replacing the standard gross margin. Data of the 2010 census should be available by the end of 2012. However, SO values are currently only calculated backwards for 2007, making the available time series very short.