Regional Economic Accounts for Agriculture Base 2016

Methodological inventory

Questionnaire on the compiling of Regional Economic Accounts for Agriculture

Introductory note

This document is an inventory of sources and methods of the Regional Economic Accounts for Agriculture (REAA), Base 2016.

The REAA series start in 1995 and are presented in the regional detail Nomenclature of Territorial Units for Statistics, NUTS2.

The sources and methodologies presented correspond to the final option, after testing several hypotheses. The choice of the methodology is related to the consistency of the results and the quality of the basic information, given that, in many cases, theoretically better sources proved to be difficult to apply in the final calculation of REAA. It tried to replicate as much as possible the methodology and sources for determining the national values of the Economic Accounts for Agriculture (EAA).

The structure presented in this inventory is pre-defined by Eurostat, in the form of a questionnaire.

Questionnaire notes

There is a need to assist users with methodological information related to the available regional information. Information on the compilation of the EAA that supports the methodology of these accounts at national level can be found on the Instituto Nacional de Estatística (INE), I.P. – Statistics Portugal website, under Methodological Notes - Economic Accounts for Agriculture - Base 2016.

The questionnaire is divided into three parts:
• The first part focuses on general information in the compilation of regional EAA data: coverage, institutions, publications, etc.;
• The second part deals with general information on how REAA are compiled and possible additional information; and,
• The third part covers the relationship between the REAA data and the Regional National Accounts, usually compiled at NUTS3 level. Below is a description of the methodology and sources used for each REAA item.

There are two basic answer options in the questionnaire: "Bottom-up" or "Top-down", marked with "X".

"Bottom-up" means that the values are - or may be - calculated by NUTS2 level using the same type of information as for national results. For example, if the main sources for determining the value of milk production is the quantity multiplied by a national average price, for EAA and REAA, the method is "Bottom-up".

"Top-down" means that the national value of EAA is distributed by regional values using information from sources other than those used to compile national values. For example, if the EAA value for fertilizer use is based on values and prices and the regional breakdown is based on the Farm Accountancy Data Network (FADN) or the Farm Structure Survey (FSS), the approach is "Top down".

1. General information about the compiling of REAA

Country:	**Portugal**
REAA compiled from year:	**1995**
Number of NUTS1 regions:	**3**
NUTS1 regions eventually not covered by REAA (names/codes):	**-**
Number of NUTS2 regions:	**7**
NUTS2 regions eventually not covered by REAA (names/codes):	**-**
Institution(s) responsible for compiling the regional EAA: Instituto Nacional de Estatística (INE), I.P. – Statistics Portugal (SP)	
Further explanations:	
Are the regional EAA published, on paper and/or electronically? (If Yes, please mention the titles and/or the links) **REAA are available on the Eurostat website** **http://ec.europa.eu/eurostat/data/database** or **http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=agr_r_accts&lang=en** **and in Statistics Portugal website** **https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_cnacionais&xlang=pt** **https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=cn_quadros&boui=391696238** in the Satellite Accounts section, area of the statistical information domain relative to National Accounts / E - Satellite Accounts / E.1 Economic Accounts for Agriculture **/ E.1.2 Regional Economic Accounts for Agriculture**	

2. General methodology information about the compiling of REAA

Methodology as described refers mainly to year:	**2016 and 2017 (Base 2016)**
Does the method used ensure that the aggregation of results at regional data corresponds with results on national level? Y/N	**Y**

General comments on the methodology: The methodology used is mostly Bottom-up, given that the sources are identical to those used to determine national values: quantity multiplied by a national average price.

Does the methodology take into consideration that animals, products, goods, etc. are crossing regional borders, meaning that part of the inter-unit use at national level are to be treated as sale/purchase in the regional EAA? Please explain (in brief): The methodology used implicitly admits trade between regions of goods intraconsumed in agriculture, since the variables of regionalization of production and intermediate consumption of these products are different (e.g., production and intermediate consumption of straw).

Main changes in the methodology before or after the reference year:

There are no methodological changes, but only the updating of structures with more recent data and sources, such as the 2009 Agricultural Census and the 2011 Horticulture Survey.

Given the revisions of the NUTS observed in 2013, it was not always possible to obtain information with the new regional detail for 1995-1999. In some cases, it was necessary to apply structures to re-estimate the NUTS2 that were changed ("Lisboa", "Alentejo" and "Centro").

The subsequent revision of the 2013 NUTS had the consequence, at NUTS2 level, of the renaming of the "Lisboa" (Lisbon) region to "Área Metropolitana de Lisboa" (Lisbon Metropolitan Area).

If the methodology for regional EAA is documented, please give the title and/or the links:

The methodology is, so far, only available in this inventory of sources and methods.

Further explanations:

3. Relation between REAA and compiling of regional data for National Accounts

Is the compiling of regional EAA (NUTS2) and data for NA-agriculture (NACE group 01) at NUTS3-level a joint operation? Y/N	**N**
Are the sources used in compiling REAA coordinated with breakdown methods used in National Accounts? Y/N/Partly	**Y**
Please explain (in brief) if the above answer is *Partly*:	
Further explanations:	

4. Abbreviations used (in section 5-9)

CCCAM	Caixa Central de Crédito Agrícola Mútuo (Crédito Agrícola Group)
CCF (CFC)	Consumo de Capital Fixo (Consumption of Fixed Capital)
CEA (EAA)	Contas Económicas da Agricultura (Economic Accounts for Agriculture)
DGADR	Direção-Geral de Agricultura e Desenvolvimento Rural (Directorate-General of Agriculture and Rural Development)
DGEG	Direção-Geral de Energia e Geologia (Directorate-General of Energy and Geology)
DGT	Direção-Geral de Turismo (Directorate-General of Tourism)
DOP	Denominação de Origem Protegida (Protected Designation of Origin)
EDP	EDP Distribuição (Electricity of Portugal)
EPA	Estatísticas da Produção Animal (Animal Production Statistics)
EPV	Estatísticas da Produção Vegetal (Crop Production Statistics)
FBCF (GFCF)	Formação Bruta de Capital Fixo (Gross Fixed Capital Formation)
FUE	Ficheiro de Unidades Estatísticas (Central Register of Enterprises and Establishments)
IAPI	Inquérito Anual à Produção Industrial (Annual Survey on Industrial Production)
IEEA	Inquérito à Estrutura das Explorações Agrícolas (Farm Structure Survey)
IES	Informação Empresarial Simplificada (Simplified Business Information - SBI)
IFAP	Instituto de Financiamento da Agricultura e Pescas, I.P. (Financing Institute for Agriculture and Fisheries)
IVV	Instituto da Vinha e do Vinho, I.P. (Institute of Vineyards and Wine)
MA	Ministério da Agricultura (Ministry of Agriculture)
MATE	Ministério do Ambiente e da Transição Energética (Ministry of Environment and Energy Transition)
METD	Ministério da Economia e da Transição Digital (Ministry of Economy and Digital Transition)
NIF (TIN)	Número de Identificação Fiscal (Tax Identification Number)
POC (OAP)	Plano Oficial de Contabilidade (Official Accountant Plan)
PRAG (PAP)	Preços na Agricultura (Prices of Agricultural Products)
RA	Regiões Autónomas (Autonomous Regions)
RA09	Recenseamento da Agricultura 2009 (Agricultural Census 2009)
RGA99	Recenseamento Geral da Agricultura 1999 (General Census of Agriculture 1999)
RICA	Rede de Informação de Contabilidades Agrícolas (Farm Accountancy Data Network)
RPU	Regime de Pagamento Único (Single Payment Scheme)
SEC/ESA 2010	Sistema Europeu de Contas Nacionais e Regionais 2010 (European System of National and Regional Accounts 2010
SIFIM (FISIM)	Serviços de Intermediação Financeira Indiretamente Medidos (Financial Intermediation Services Indirectly Measured)
SNC (ASS)	Sistema de Normalização Contabilística (Accounting Standard System)
UTA (AWU)	Unidade Trabalho Ano (Annual Work Unit)
VLQPRD	Vinho Licoroso de Qualidade Produzido em Região Demarcada (Quality Liqueur Wine Produced in a Specific Region)

5. Methodology used for output values in REAA in producer prices
   (Introduce X in the relevant box and mention the sources)

EAA code	EAA name	Bottom-up	Top-down	Sources used
01000	Cereals, incl. seeds	x		Grain: EPV - quantity produced (soft wheat, durum wheat, barley, oats, maize, paddy rice, rye, triticale); MA - IFAP - Subsidies - areas (sorghum); Straw: EPV - production of cereals that give rise to straw - wheat, barley, oats, and rye, weighted by a coefficient of conversion of cereal to straw.
02100	Oil seeds and oleaginous fruits	x		EPV - sunflower production; MA - IFAP - Subsidies - areas (rapeseed and nabite, soybeans, other oilseeds - non-textile flax)
02200	Protein crops	x		MA – IFAP - Subsidies – areas (pies, broad beans and sweet lupines)
02300	Raw tobacco	x		EPV - quantity produced
02400	Sugar beet	x		EPV - quantity produced
02900	Other industrial crops	x		RGA99 / RA09 - area (textile linen; medicinal plants - also IEEA); EPV - production of hops, chickpeas, beans; sugar cane is only produced in R.A. Madeira
03000	Forage plants		x	RGA99 / RA09 / EPV - corn area for silage; Permanent Pastures, Meadows and Temporary Pastures area - Main Culture; EPV - corn production (regionalization of hay)
04100	Fresh vegetables		x	EPV - quantity produced (tomato for industry); Horticulture Survey - Production (other vegetables)
04210	Nursery plants		x	Fruit and olive trees sold by nurseries owners survey - origin of nursery plants; RGA99 / RA09 / IEEA - the value in the RA is determined through the relative weight of the respective areas
04220	Ornamental plants and flowers		x	RGA99 / RA09 / IEEA, with linear interpolation between intermediate years
04230	Plantations		x	Fruit and olive trees sold by nurseries owners survey - Number of fruit and olive trees sold directly to farmers in the Mainland; IEEA - cost of installation and maintenance of plantations and nursery plants in the Autonomous Regions of the Azores and Madeira
05000	Potatoes	x		EPV - quantity of potato for consumption; Certified potato seed produced only in the Autonomous Region of Azores and in the NUTS2 region Norte (data for 1995 to 2007, for the remaining years there are no certification requests)

06000	Fruits	x		Annual horticulture survey - strawberry production; MA - Vegetable production yearbook - production of tropical fruits; EPV - quantity produced (remaining fruits)
07000	Wine	x		MA - IVV (declared production of different types of wine); PRAG survey on the price of DOP quality wines (formerly VQPRD) and Liqueur wines DOP (formerly VLQPRD)
08000	Olive oil	x		EPV - quantity produced (Annual olive oil production survey)
09000	Other crops	x		RGA99 / RA09 - areas of aromatic plants; forage seeds, fruits and vegetables; IEEA - sweet potato and yam areas; only R.A. Madeira produces wicker; only the R.A. Azores has tea production
11100	Cattle		x	EPA - cattle livestock
11200	Pigs		x	EPA - swine livestock
11300	Equines		x	EPA - horse livestock
11400	Sheep and goats		x	EPA - sheep and goats livestock
11500	Poultry	x		RGA99 / RA09 and IEEA - poultry livestock; EPA - poultry production
11900	Other animals		x	EPA - quail production RGA99 / RA09 and IEEA – rabbits livestock; IES (SBI) - pigeons, dogs and game (Production - Breeding pets and Other animal production)
12100	Milk	x		EPA – cow's milk production, dairy goat and sheep milk
12000	Eggs	x		EPA - Annual eggs production survey
12900	Other animal products	x		RGA99 / RA09 - Number of hives, until 2002; EPA since 2003 (honey, wax); EPA – cattle livestock - Bovine animals 2 years old and over - Males (bovine semen); EPA - Wool and skins
15000	Agricultural services		x	Structure of total production of agricultural goods
17100	Processing of agricultural products		x	Production structure of processed products (wine, vegetables, milk, animals); Structure of the total production of agricultural goods (remaining products);
17900	Other inseparable secondary activities (goods and services)		x	Structure of the total production of agricultural goods; IES (SBI) - production of non-agricultural secondary activities (products: Wholesale of milk and its derivatives and eggs; of olive oil; and of agricultural machinery and equipment; Retail trade of motor vehicle fuels, among others)

6. Methodology used for subsidies in the REAA

In the most recent years of the EAA series, Instituto Nacional de Estatística (INE), I.P. – Statistics Portugal started receiving from IFAP - I.P. more complete information of the amounts paid in the year, subdivided not only by type of aid and source of payment (community or national), but now including the beneficiary's Tax Identification Number (TIN) and the NUTS2 region. The information provided along these lines has enabled the regional allocation of amounts paid, classified by operation of the European System of National and Regional Accounts (ESA 2010) (subsidies, transfers, taxes) since the 2010 account (subsidies, transfers, taxes) to be made more accurately. The methodology for regional allocation of subsidies is currently Bottom up.)

EAA code	EAA name	Bottom-up	Top-down	Sources used
01000	Cereals, incl. seeds	x		MA (IFAP) - subsidies paid
02100	Oil seeds and oleaginous fruits	x		MA (IFAP) - subsidies paid
02200	Protein crops	x		MA (IFAP) - subsidies paid
02300	Raw tobacco	x		MA (IFAP) - subsidies paid
02400	Sugar beet	x		MA (IFAP) - subsidies paid
02900	Other industrial crops	x		MA (IFAP) - subsidies paid
02000	Industrial crops	x		MA (IFAP) - subsidies paid
03000	Forage plants	x		MA (IFAP) - subsidies paid
04100	Fresh vegetables	x		MA (IFAP) - subsidies paid
05000	Potatoes	x		MA (IFAP) - subsidies paid
06000	Fruits	x		MA (IFAP) - subsidies paid
07000	Wine	x		MA (IFAP) - subsidies paid
08000	Olive oil			-
09000	Other crops	x		MA (IFAP) - subsidies paid
11100	Cattle	x		MA (IFAP) - subsidies paid
11200	Pigs			-
11300	Equines			-
11400	Sheep and goats	x		MA (IFAP) - subsidies paid
11500	Poultry			-
11900	Other animals			-
12100	Milk	x		MA (IFAP) - subsidies paid
12000	Eggs			-
15000	Agricultural services			-
17100	Processing of agricul-tural products			-
17900	Other inseparable secondary activities (goods and services)			-

7. Methodology used for taxes in the REAA
(Introduce X in the relevant box and mention the sources)

EAA code	EAA name	Bottom-up	Top-down	Sources used
01000	Cereals, incl. seeds			-
02100	Oil seeds and oleaginous fruits			-
02200	Protein crops			-
02300	Raw tobacco			-
02400	Sugar beet			-
02900	Other industrial crops			-
03000	Forage plants			-
04100	Fresh vegetables			-
04200	Plants and flowers			-
05000	Potatoes			-
06000	Fruits			-
07000	Wine		x	Amounts of special taxes on consumption, received from the Ministry of Finance, are allocated to the product "wine" using the total wine production structure
08000	Olive oil			-
09000	Other crops			-
11100	Cattle			-
11200	Pigs			-
11300	Equines			-
11400	Sheep and goats			-
11500	Poultry			-
11900	Other animals			-
12100	Milk	x		MA (IFAP) - taxes paid (see introduction to point 6 - exceeding quotas)
12000	Eggs			-
15000	Agricultural services			-
17100	Processing of agricultural products			-
17900	Other inseparable secondary activities (goods and services)			-

8. Methodology used for intermediate consumption and fixed capital consumption in the REAA
(Introduce X in the relevant box and mention the sources)

EAA code	EAA name	Bottom-up	Top-down	Sources used
19010	Seed and planting stock		x	EPV - cultivated areas of the respective culture; Fruit and Olive Tree Sold by Nurseries Owners Survey (destination of nursery plant sales)
19020	Energy		x	EDP - electricity consumption on Mainland Portugal; MATE - DGEG - Petroleum product sales in Domestic Market (propane, butane and conduct gas, gasoline, fuel, oil, uncoloured diesel, others); MA - DGADR (coloured diesel); MA - RICA (FADN) - electricity in RA of Azores and of Madeira
19030	Fertilisers and soil improvers		x	MA – RICA (FADN) - fertilizer consumption: 2006 to 2017: Information received by NUTS2 1995 to 2005: the structure of vegetable production was applied, excluding olive oil and wine, to NUTS2 (1989) which were changed ("Area Metropolitana de Lisboa" - "AML", "Alentejo" and "Centro")
19040	Plant protection products and pesticides		x	MA – RICA (FADN) - pesticide consumption: 2006 to 2017: Information received by NUTS2 1995 to 2005: the structure of vegetable production was applied, excluding olive oil and wine, to NUTS2 (1989) which were changed ("AML", "Alentejo" and "Centro")
19050	Veterinary expenses		x	MA – RICA (FADN) - other livestock expenses: 2006 to 2017: Information received by NUTS2 1995 to 2005: the structure of animal production was applied to NUTS2 (1989) which were changed ("AML", "Alentejo" and "Centro")
19061	Feedingstuffs supplied by other agricultural holdings		x	MA - RICA (FADN) - purchased fodder: 2006 to 2017: Information received by NUTS2 1995 to 2005: the structure of the production of forage plants was applied to NUTS2 (1989) that were changed ("AML", "Alentejo" and "Centro")

19062	Feedingstuffs purchased from outside agricultural industry		x	For livestock, poultry and day chicks: EPA, distributed with the structure of the respective compound feedstuffs; Rabbits and other poultry: RGA99 / RA09 and IEEA, distributed with the structure of the respective compound feedstuffs;
19063	Feedingstuffs produced and consumed by the same holding		x	Production of the respective simple feedstuffs (cereals, protein crops, etc.)
19070	Maintenance of materials		x	MA – RICA (FADN) - equipment maintenance and repair: 2006 to 2017: Information received by NUTS2 1995 to 2005: the structure of the production of agricultural goods was applied to NUTS2 (1989) which were changed ("AML", "Alentejo" and "Centro")
19080	Maintenance of buildings		x	MA – RICA (FADN) - maintenance of buildings and land improvements: 2006 to 2017: Information received by NUTS2 - 1995 to 2005: the structure of the production of agricultural goods was applied to NUTS2 (1989) which were changed ("AML", "Alentejo" and "Centro")
19090	Agricultural services	x		Agricultural services production
19095	FISIM		x	See Interest paid
19900	Other goods and services		x	Production of agricultural goods, with exceptions: DOP liqueurs (former VLQPRD); intermediate consumptions used exclusively for the production of wine and olive oil were allocated to the production structure of the respective products
21110	FCC Equipment		x	Regional GFCF on Equipment
21200	FCC Buildings		x	Regional GFCF on Buildings
21300	FCC Plantations		x	Regional GFCF on Plantations
21900	FCC Other		x	Regional GFCF on Others

Note: After initial estimate of the regionalization of Intermediate Consumption, the data are calibrated with the data from the Regional Economic Accounts of the National Accounts, in order to ensure consistency between GVA levels and technical coefficients.

9. Methodology used for income and capital account in REAA in basic prices (Introduce X in the relevant box and mention the sources)

EAA code	EAA name	Bottom-up	Top-down	Sources used
23000	Compensation of employees		x	MA - IVV (production of wine cooperatives); EPV - (production of olive oil cooperatives); IES (SBI) - Regional Accounts compensation of employees;
24000	Other taxes on production		x	Total goods and services production
25000	Other subsidies on production	x		(see introduction of point 6) MA - IFAP (measures such as the Single Payment Scheme (SPS), rural development, forestry and agro environmental measures, compensatory allowances, aid related to cereals, honey, olive oil, etc.); In the early years of data series, the structures of the underlying production of some products (aids related to olive oil, fruit, vegetables, cattle, sheep, wine products, honey, "blue tongue") were used for regional allocation; Intermediate Consumption Structure ("green electricity")
28000	Rents, paid	x		RGA99 / RA09 / IEEA and national legislation (maximum rents, by region)
29000	Interest paid		x	Central Mutual Agricultural Credit Fund (CCCAM) - country, except R.A. Madeira; MA – RICA (FADN) (percentage weight of R.A. Madeira)
30000	Interest received	x		IES (SBI) - (Interest earned - account 781 of the SNC
32100	CFCF in plantations		x	Fruit and Olive Trees sold by nurseries owners survey - sales destination of nursery plants (fruit tree plantations); MA - IVV (plantation and replanting of vineyard)
32200	CFCF in animals	x		EPA (Variation of livestock classified as fixed capital good)
33100	GFCF in materials		x	National Accounts - GFCF Matrix by industry and type of asset of the Regional National Accounts (Industry Agriculture, Animal production, Hunting, Forestry and Fishing (product Machinery and equipment)
33200	GFCF in buildings		x	National Accounts - GFCF matrix by industry and type of asset in the Regional National Accounts (Industry Agriculture, Animal Production, Hunting, Forestry and Fishing (product Other buildings and constructions)
33900	Other GFCF		x	National Accounts - GFCF Matrix by industry and type of asset of the Regional National Accounts (Industry Agriculture, Animal production, Hunting, Forestry and Fishing (product

				Computing software and BD product and I&D)
36000	Changes in stocks		x	Production structure of the related products
37000	Capital transfer		x	(see introduction of point 6) MA - IFAP; for years before 2010, the related productions were used to allocate the capital transfer by region (plantation of vineyard and olive trees, cattle, goats, tobacco, fruits, etc.)