



# LUXEMBOURGISH AGRICULTURE

## FACTS AND FIGURES

# 2020





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# FOREWORD

## **THE AGRICULTURAL SECTOR**

has, more than any other economic sector in Luxembourg, experienced a very rapidly changing environment in recent years.

## **IT HAS HAD TO**

and must continue to constantly adapt to changing weather conditions - keyword climate change - as well as to the intensifying competition in the context of globalisation.

## **THE POLITICAL FRAMEWORK CONDITIONS**

in agriculture are defined at European level and are currently in a transition phase towards the next reform of the common agricultural policy, which is being prepared for the period 2023 to 2027.

## **THE FUTURE ORIENTATION**

will place a strong emphasis on the “Farm to Fork” strategy - and this in the context of the so-called “Green Deal” with the overall economy. Climate protection, environmental protection, protection of human and animal health will increasingly be in the focus of decisions and financial expenditures.

## **IN ADDITION,**

the Member States are responsible for defining concrete objectives in the national strategic plan for farms and rural development, monitoring the progress of the measures taken and, if necessary, taking corrective action.

## **THIS OBLIGATION**

to continuous self-evaluation is a very important shift of responsibility from an overarching control by the European Commission services to the Member States' own evaluation of the national targets set.

## **IN THIS OVERALL CONTEXT,**

the publication of figures, in whatever form, relating to agriculture is a very important means of decision support for all actors in the sector.

**THE AGRICULTURAL STATISTICS DEPARTMENT,**

agricultural markets and external relations of the Service d'économie rurale has compiled the most recent data on the agricultural sector in this brochure. The sector is represented in its entirety by means of figures in tabular and graphic forms on:

- the structure of agricultural holdings,
- agricultural production,
- the prices of agricultural products and
- the economic situation of farms.

The brochure is available for download on the agriculture portal.



**Romain SCHNEIDER**  
Minister of Agriculture,  
Viticulture and  
Rural Development

# 1. NATURAL CONDITIONS

## GEOGRAPHICAL DATA

### LOCATED BETWEEN BELGIUM

in the north and west (148 km of borderline), Germany in the east (135 km of borderline) and France in the south (73 km of borderline), Luxembourg has a maximal east-west width of 57 km and a maximal north-south length of 82 km. The total area of Luxembourg is 2.586 km<sup>2</sup>.

### THE TWO MAIN REGIONS

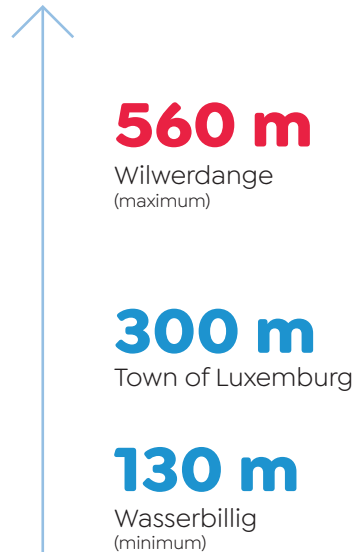
of Luxembourg are the Oesling in the north and the Gutland in the south. The Oesling is part of the Ardennes or the “Rheinisches Schiefergebirge” and is a large plateau intersected by narrow valleys with steep slopes. It covers 828 km<sup>2</sup> (32% of the total area).

The Gutland has various soils originated mainly by the geological formations of the Lias and Trias. It covers 1.758 km<sup>2</sup> (68% of the total area).

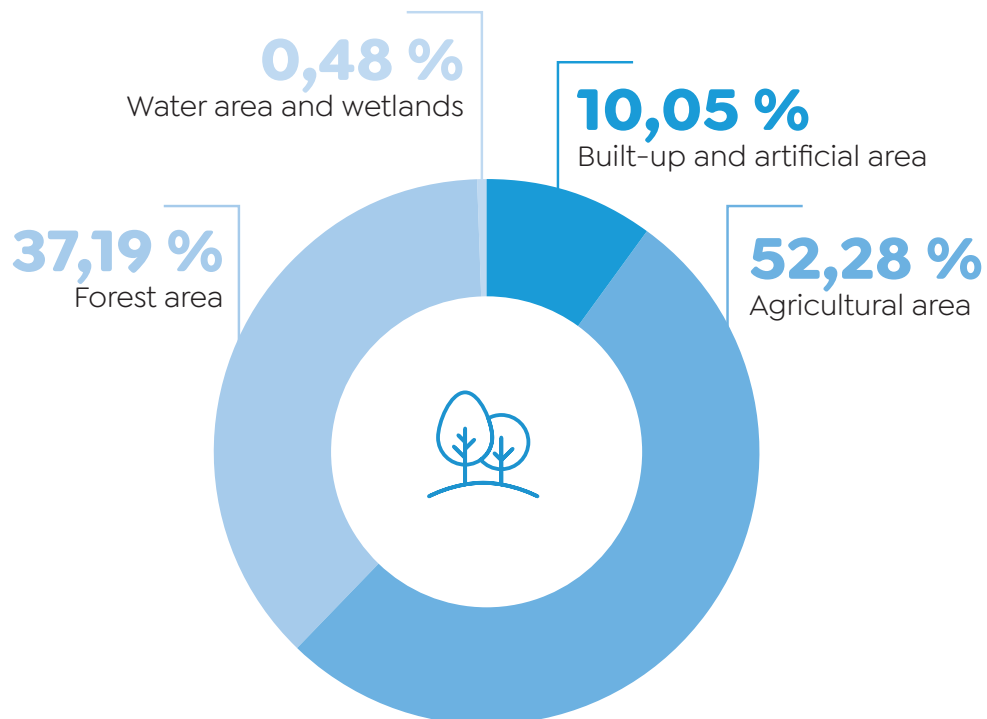
### THE ALTITUDE

ranges from a maximum of 560 m (near Wilwerdange) to 130 m (Wasserbillig).

The town of Luxembourg is situated 300 m above sea level.



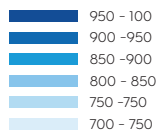
## LAND USE 2017



**Source:** Ministère du Développement durable et des Infrastructures, Administration de l'Environnement, 2019, National inventory of greenhouse gas emissions, table 211, page 473, Report downloadable : <https://unfccc.int/documents/194915>

**Note :** the areas reported in this table are defined and calculated following the rules edited by the Intergovernmental Panel on climate Change (IPCC) in the framework of the reporting to the United Nations Framework Convention on Climate Change (UNFCCC).

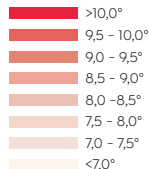
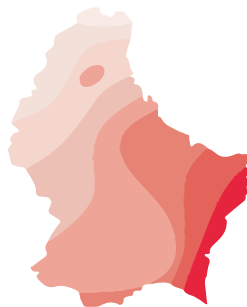
## METEOROLOGICAL AND GEOLOGICAL CONDITIONS



### ANNUAL PRECIPITATIONS IN MM

Geographical distribution of the annual precipitation (30 years average) in Luxembourg

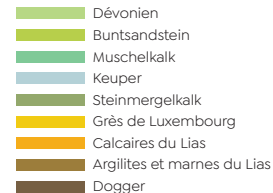
SOURCE: ASTA



### AVERAGE TEMPERATURE IN °C

Geographical distribution of average temperature in Luxembourg

SOURCE: ASTA



### GEOLOGICAL MAP

(schematic)

SOURCE: Ministère des Travaux publics, Service de Géologie



## 2. POPULATION

	Unit	1991 <sup>1</sup>	2001 <sup>1</sup>	2011 <sup>1</sup>	2018 <sup>2</sup>	2019 <sup>2</sup>	2020 <sup>2</sup>
<b>Total population*</b>	1000 Pers.	384,4	439,5	512,4	602,0	613,9	626,1

### OF WHICH:

<b>Men</b>	1000 Pers.	188,3	216,5	255,0	302,6	308,7	315,0
<b>Women</b>	1000 Pers.	196,1	223,0	257,4	299,4	305,2	311,1
<b>Luxembourgers</b>	1000 Pers.	271,4	277,2	291,9	313,8	322,4	329,6
<b>Non-Luxembourgers</b>	1000 Pers.	113,0	162,3	220,5	288,2	291,5	296,5

### POPULATION BY AGE GROUPS\*:

<b>Working (15 - 64 years)</b>	(%)	68,4	67,2	68,7	69,5	69,5	69,5
<b>Children (0 - 14 years)</b>	(%)	17,3	18,9	17,3	17,3	16,1	16,0
<b>Seniors (age 65+)</b>	(%)	14,3	13,9	14,0	14,0	14,4	14,5

Source: STATEC

\* Situation on January 1<sup>st</sup>

<sup>1</sup> General population census

<sup>2</sup> Calculation on the basis of the last general population census and the natural and migration balances.

### 3. IMPORTANCE OF AGRICULTURE IN THE ECONOMY OF LUXEMBOURG

	2000	2005	2010	2015	2016	2017	2018
<b>Gross value added at basic prices in mio €</b>							
of agriculture, forestry, and fishing	143,8	106,7	99,3	117,5	117,4	139,0	136,4
of the whole economy (incl. FISIM <sup>1</sup> )	20.619,4	26.668,2	36.137,2	47.056,8	49.770,6	51.599,0	54.377,7
<b>Part of agriculture in g.v.a. at basic prices in %</b>	0,7	0,4	0,3	0,2	0,2	0,3	0,3
<b>Total agricultural labour input (thousands of AWU<sup>2</sup>)</b>	4,3	4,0	3,7	3,5	3,4	3,4	3,4
<b>Total labour input of whole economy (thousands of persons)</b>	264,0	307,7	359,6	406,1	418,4	432,7	448,8
<b>Part of agriculture in total labour input*</b>	1,6	1,3	1,0	0,9	0,8	0,8	0,8
<b>Gross fixed capital formation in agriculture (mio €)</b>	62,3	96,7	129,9	98,6	83,1	82,2	111,0
<b>Gross fixed capital formation in whole economy (mio €)</b>	4.666,8	5.736,9	7.074,6	9.481,5	9.951,6	10.658,4	10.096,4
<b>Part of agriculture in GFCF of whole economy (in %)</b>	1,3	1,7	1,8	1,0	0,8	0,8	1,1

Sources: STATEC, SER

\* as the measure units of labour input are different for agriculture and the whole economy, an exact comparison is not possible.

<sup>1</sup> FISIM = Financial Intermediation Services Indirectly Measured.

<sup>2</sup> AWU = annual work unit: 1 AWU is equivalent to a worker employed on a full time basis in one year. In Luxembourg it is as 2200 working hours per year (275 eight-hour working days).

## 4. FARM STRUCTURES

### NUMBER OF AGRICULTURAL HOLDINGS

	1990	2000	2010	2015	2016	2017	2018	2019
<b>Total number of agricultural holdings</b>	3.803	2.728	2.201	2.022	1.965	1.943	1.906	1.872
<b>Number of agricultural holdings by their legal and economic form</b>								
Family holdings*	3.768	2.656	2.061	1.880	1.844	1.827	1.781	1.787
Group holdings**	35	41	87	86	70	69	73	41
Holdings assumed by a corporate person		31	53	56	51	47	52	44
<b>Number of family holdings and group holdings by principal/secondary occupation of the manager</b>								
Holdings with principal occupation***	2.528	1.729	1.468	1.321	1.317	1.096	1.074	1.094
Holdings with secondary occupation	1275	968	680	645	597	800	780	734

Source: Farm Structure Survey (since 2017: SER, before 2017: STATEC).

**\* Family holding:**

the legal and economic responsibility of the holding is assumed by a natural person who is a sole holder of an independent holding, including shared ownership from 2019 onwards.

**\*\* Group holding:**

association of agricultural holdings with exclusive management of means of production made available by the members of the group holding.

**\*\*\* Holding with principal occupation:**

Family holding or group holding (since 2003) where the holder works more than 50% of his working time on the agricultural holding and has no other gainful main activity.  
Since 2017: holdings with a standard output > 75000€.

## USE OF AGRICULTURAL LAND

Unit: ha	1990	2000	2010	2015	2016	2017	2018	2019
<b>Utilized agricultural area</b>	126.298	127.643	131.106	131.384	130.651	131.163	131.559	131.592
<b>Arable land</b>	55.891	60.927	61.951	62.798	61.856	62.039	62.114	61.959
<b>Permanent grassland</b>	68.827	65.277	67.526	66.923	67.115	67.413	67.705	67.884
<b>Other agricultural land</b>	1.580	1.439	1.629	1.663	1.680	1.711	1.741	1.749
<b>Cereals</b>	32.980	28.639	29.713	29.288	27.857	27.960	26.309	27.393
<b>Wheat and spelt</b>	8.625	10.971	14.009	14.494	13.808	14.185	12.984	13.458
<b>Rye</b>	557	672	896	896	904	951	1.082	1.137
<b>Barley</b>	15.682	10.538	8.261	7.713	6.901	6.594	6.004	6.064
<b>Oats and mixed cereals</b>	5.723	2.379	1.348	1.381	1.390	1.520	1.419	1.644
<b>Grain maize</b>	-	255	375	141	125	81	91	143
<b>Triticale</b>	2.272	3.635	4.780	4.604	4.609	4.520	4.669	4.911
<b>Other cereals</b>	121	189	44	59	119	108	61	36
<b>Dried pulses</b>	537	431	336	588	682	621	409	407
<b>Potatoes</b>	826	829	615	570	615	622	627	601
<b>Industrial crops</b>	1.999	3.344	4.867	5.199	4.631	4.310	4.780	3.931
<b>Rapeseed</b>	1.951	3.245	4.715	3.973	3.508	3.267	3.393	2.883
<b>Forage crops</b>	19.024	25.523	25.371	26.091	27.040	27.393	28.821	28.545
<b>Maize (for silage)</b>	7.473	10.799	13.435	13.648	14.192	14.538	14.990	15.070
<b>Temporary grass</b>	-	14.178	11.461	10.990	10.909	11.122	12.063	11.745
<b>Forage legumes</b>	-	469	447	955	1.005	1.017	904	863
<b>Forage beets and other root crops</b>	-	77	27	137	154	111	77	79
<b>Other crops</b>	22	2	717	784	807	903	904	812

Unit: ha	1990	2000	2010	2015	2016	2017	2018	2019
<b>Fallow ground</b>	272	1.527	139	280	223	230	263	269
<b>Permanent grassland</b>	68.827	65.277	67.526	66.923	67.115	67.413	67.705	67.884
<b>Horticulture</b>	19	21	48	102	129	144	167	183
<b>Permanent crops</b>	1.440	1.365	1.503	1.551	1.541	1.558	1.562	1.556
<b>Area under wine growing</b>	1.326	1.249	1.266	1.296	1.284	1.298	1.291	1.286
<b>Fruit orchards</b>	57	53	133	163	155	164	173	174
<b>Tree nurseries</b>	49	55	86	71	76	70	71	72
<b>Other permanent crops<sup>1</sup></b>	8	8	18	21	25	27	27	24

<sup>1</sup> Including Christmas trees from 2010 onwards.

Source: Farm Structure Survey (since 2017: SER, before 2017: STATEC).

## SHARE OF MAIN LAND TYPES IN UTILISED AGRICULTURAL AREA

**51,6 %**

Permanent Grassland

**3,0 %**

Industrial crops

**0,5 %**

Potatoes

**21,7 %**

Forage crops

**1,2 %**

Permanent crops

**0,3 %**

Dried pulses

**0,1 %**

Horticulture

**20,8 %**

Cereals

**0,6 %**

Other crops

**0,2 %**

Fallow ground

## NUMBER OF FARMS PER SIZE CLASS

	1990	2000	2010	2015	2016	2017	2018	2019
<b>Total number of farms</b>	3.803	2.728	2.201	2.022	1.965	1.943	1.906	1.872
<b>Average area per farm (ha/farm)</b>	33,2	46,8	59,6	65,0	66,5	67,5	69,0	70,3
<b>Number of farms in size class under 2 ha</b>	523	335	220	185	172	170	160	164
<b>Number of farms in size class from 2 to 4,9 ha</b>	465	270	158	139	135	119	126	119
<b>Number of farms in size class from 5 to 9,9 ha</b>	319	245	217	176	169	181	167	152
<b>Number of farms in size class from 10 to 19,9 ha</b>	388	207	171	164	163	153	150	156
<b>Number of farms in size class from 20 to 29,9 ha</b>	307	156	120	123	107	117	114	114
<b>Number of farms in size class from 30 to 49,9 ha</b>	685	346	242	195	199	189	178	174
<b>Number of farms in size class from 50 to 69,9 ha</b>	1.010	424	257	223	209	200	205	190
<b>Number of farms in size class from 70 to 99,9 ha</b>		449	381	350	329	326	308	293
<b>Number of farms in size class from 100 to 149,9 ha</b>	106	296	435	467	482	302	304	313
<b>Number of farms in size class from 150 ha and more</b>						186	194	197

Source: Farm Structure Survey (since 2017: SER, before 2017: STATEC).



## NUMBER OF FARMS BY TYPE OF FARMING

	1990	2000	2010	2015	2016	2017	2018	2019
<b>Total number of farms</b>	3.803	2.728	2.201	2.022	1.965	1.943	1.906	1.872
<b>Specialist field crops</b>	260	188	154	178	154	162	168	175
<b>Specialist horticulture</b>	41	29	27	28	29	26	30	38
<b>Specialist permanent crops</b>	683	453	363	310	294	293	280	272
of which specialist vineyards	-	436	348	289	277	271	258	249
<b>Specialist grazing livestock</b>	2.056	1.576	1.436	1.315	1.293	1.274	1.244	1.220
of which specialist dairying*	-	863	587	515	547	544	536	530
of which specialist cattle - rearing and fattening*	-	299	401	374	379	376	359	363
of which cattle - dairying, rearing and fattening combined*	-	175	187	166	135	116	108	92
<b>Specialist granivores</b>	38	41	25	27	33	34	32	32
<b>Mixed cropping</b>	66	28	9	7	12	10	13	10
<b>Mixed livestock</b>	162	104	51	30	36	34	34	29
<b>Mixed crops and livestock</b>	470	289	136	127	114	110	105	96
<b>Non-classifiable farms</b>	27	20	0	0	0	0	0	0

\* Change in methodology since 2010.

Source: Farm Structure Survey (since 2017: SER, before 2017: STATEC).

## THE DAIRY FARMS BY SIZE CLASS IN 2019

Size range based on deliveries of cow's milk to dairies (in 1000 kg)											
	0	200	300	400	500	750	1.000	1.250	1.500	>2 000	Total of dairy cattle holdings
	- 200	- 300	- 400	- 500	- 750	- 1 000	- 1 250	- 1 500	- 2 000		
<b>Deliveries to dairies</b>											
in 1000 kg	10.727	15.856	30.817	35.121	92.880	59.092	39.607	30.169	18.855	76.251	409.375
in %	2,62	3,87	7,53	8,58	22,69	14,43	9,68	7,37	4,61	18,63	100
<b>Number of holdings</b>											
absolute number	97	63	88	78	150	69	35	22	11	25	638
in %	15,20	9,87	13,79	12,23	23,51	10,82	5,49	3,45	1,72	3,92	100
<b>Average per class (1000 kg/holding)</b>											
	111	252	350	450	619	856	1.132	1.371	1.714	3.050	642

Source: SER, holdings with milk production on 01/01/2019.

## LIVESTOCK NUMBERS (IN HEADS)

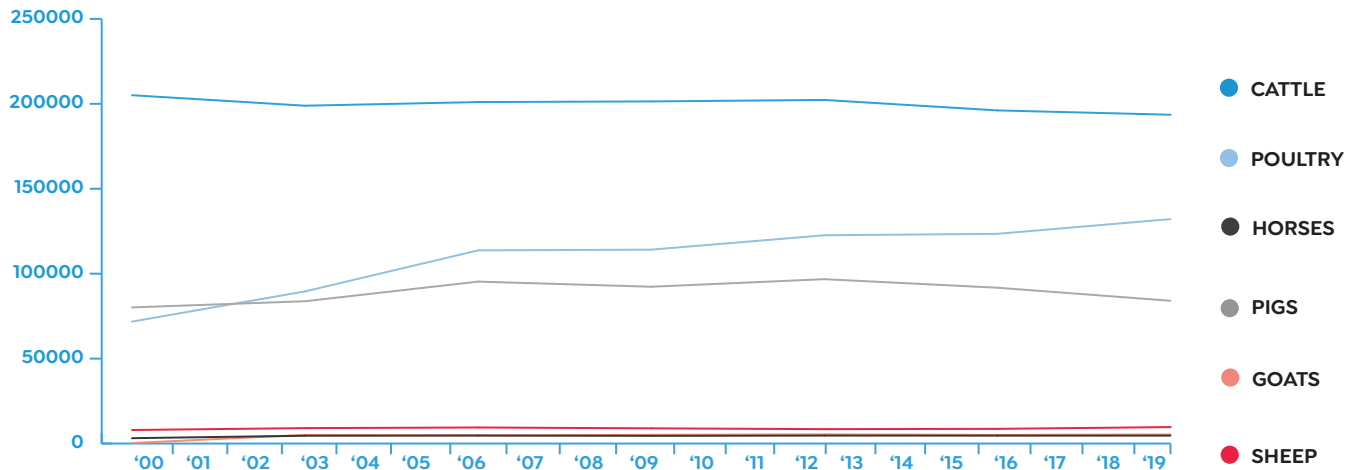
	1990	2000	2010	2015	2016	2017	2018	2019
<b>Horses</b>	1.722	3.154	4.601	4.717	4.540	4.692	4.662	4.669
<b>Total cattle</b>	217.451	205.072	198.892	201.036	201.416	202.281	196.127	193.575
Cattle under 1 year	59.553	54.806	52.253	54.059	54.666	52.571	48.965	50.551
Calves for slaughtering	1.375	4.444	3.483	3.719	5.045	4.355	4.469	4.438
Other calves	58.178	50.362	48.770	50.340	49.621	48.216	44.496	46.113
<b>Cattle from 1 to 2 years</b>	46.961	47.017	46.780	45.817	43.973	45.606	43.099	40.316
Male	12.950	16.446	16.489	14.198	12.486	12.298	11.277	10.054
Female	34.011	30.571	30.291	31.619	31.487	33.308	31.822	30.262
<b>Cattle over 2 years</b>	110.937	103.249	99.859	101.160	102.777	104.104	104.063	102.708
Male	5.442	4.383	3.700	3.702	3.115	3.328	3.271	3.190



	1990	2000	2010	2015	2016	2017	2018	2019
Heifers	24.607	22.649	18.637	21.332	20.128	20.129	22.113	19.752
Dairy cows	58.840	43.346	45.008	46.903	51.025	52.701	52.645	53.947
Suckler cows	17.563	27.610	32.485	29.223	28.509	27.946	26.034	25.819
<b>Total pigs</b>	75.463	80.141	83.774	95.337	92.312	96.761	91.736	84.065
Piglets under 20 kg*	28.185	28.824	-	-	-	-	-	-
Pigs from 20 to 50 kg*	15.315	15.811	-	-	-	-	-	-
Pigs for fattening	21.627	26.425	-	-	-	-	-	-
Piglets under 8 kg*	-	-	9.085	10.486	8.970	9.715	10.266	7.681
Pigs from 8 to 30 kg*	-	-	21.943	19.947	18.463	19.893	19.241	20.018
Pigs > 30 kg	-	-	45.157	59.478	59.493	60.938	56.147	51.374
Breeding pigs	10.336	9.081	7.589	5.426	5.386	6.215	6.082	4.992
<b>Sheep</b>	7.281	7.971	9.084	9.453	8.951	8.478	8.654	8.681
<b>Goats</b>	-	297	5.084	4.772	5.130	5.406	5.075	5.351
<b>Poultry</b>	69.021	71.785	89.581	113.727	114.148	122.609	123.462	132.128

Source: Farm Structure Survey (since 2017: SER, before 2017: STATEC).

\* Change of categories for piglets from 2003 onwards : "under 10 kg" instead of "under 20 kg" and "from 10 to 50 kg" instead of "20 to 50 kg".

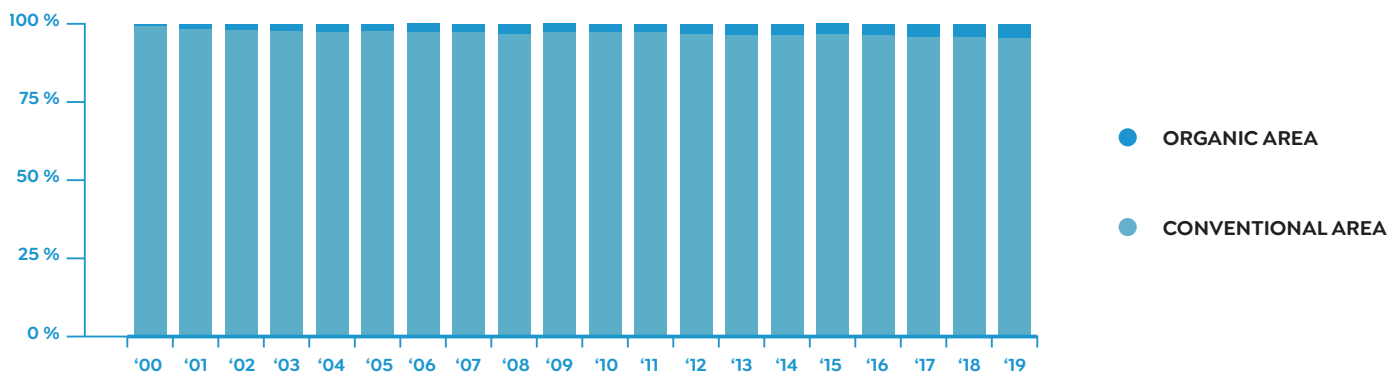


## NUMBER OF FARMS AND UTILIZED AREA BY FARMING SYSTEM

	2000	2005	2010	2015	2016	2017	2018	2019
<b>Number of farms</b>								
Conventional farming	2.705	2.396	2.132	1.939	1.879	1.843	1.803	1.767
Organic farming (1)	23	53	69	83	86	100	103	105
<b>Total</b>	2.728	2.449	2.201	2.022	1.965	1.943	1.906	1.872
<b>Utilized agricultural area (ha)</b>								
Conventional farming	126.631	126.016	127.600	127.145	126.108	125.717	125.774	125.775
Organic farming (1)	1.012	3.112	3.505	4.239	4.543	5.446	5.785	5.817
<b>Total</b>	127.643	129.128	131.106	131.384	130.651	131.163	131.559	131.592

(1) Farms that are converted or in the process of being converted and recognized by the ASTA in accordance with the regulation (EC) 834/2007, and that are above the minimum criteria for STATEC survey, including partially organic farms.

Source: Farm Structure Survey (since 2017: SER, before 2017: STATEC).





## 5. EMPLOYMENT IN AGRICULTURE\*

in Persons	1990	2000	2010	2015	2016	2017	2018	2019
<b>Family labour force</b>	8.230	5.554	4.321	3.906	3.795	3.810	3.722	3.636
<b>Men</b>	5.006	3.429	2.847	2.598	2.542	2.573	2.507	2.450
Full-time employment	2.736	1.773	1.596	1.410	1.371	1.356	1.333	1.284
Part-time employment								
< 25%	582	272	367	443	450	456	433	445
25 - 50 %	549	422	375	425	472	479	474	462
50 - 75 %	747	495	293	207	178	223	195	182
> 75%	392	467	216	113	71	59	72	77
<b>Women</b>	3.224	2.125	1.474	1.308	1.253	1.237	1.215	1.186
Full-time employment	378	145	512	457	447	437	433	422
Part-time employment								
< 25%	370	186	232	300	304	322	311	304
25 - 50 %	652	514	261	247	275	232	246	234
50 - 75 %	1.275	743	346	231	179	200	177	186
>75%	549	537	123	73	48	46	48	40
<b>Non-family labour force</b>								
Regularly employed labour force	595	650	655	926	1.000	969	1.048	1.035
Day-labourers (working days)	13.861	26.189	42.347	60.122	54.583	70.688	69.484	74.469
<b>in annual work units (AWU)<sup>1</sup></b>	<b>1990</b>	<b>2000</b>	<b>2010</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>Family labour force</b>	5.330	3.594	2.961	2.529	2.405	2.388	2.343	2.278
<b>Non-family labour force</b>	625	698	765	1.005	1.039	1.041	1.076	1.064
Regularly employed labour force	575	603	586	786	841	784	823	794
Day-labourers	50	95	179	219	198	257	253	271
<b>Total labour force</b>	5.955	4.292	3.726	3.534	3.444	3.429	3.418	3.342

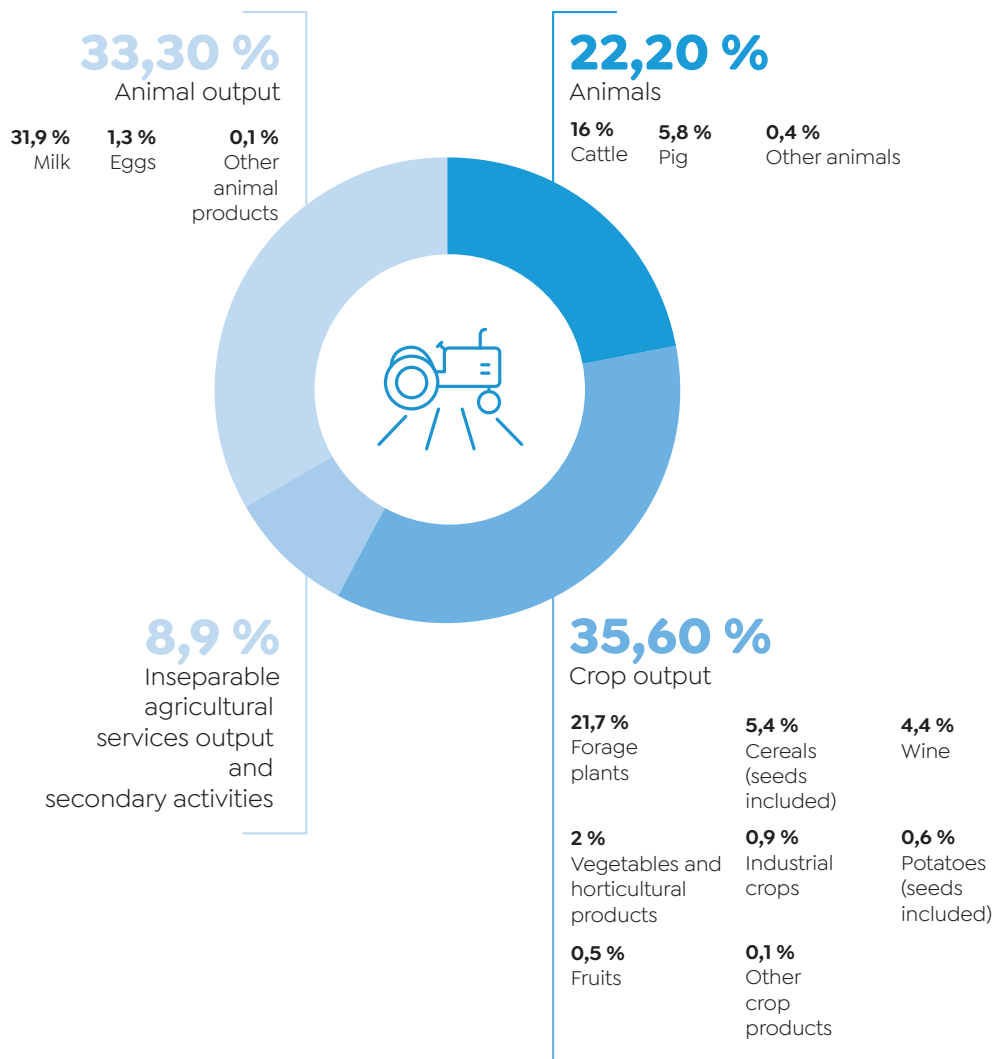
Source: Farm Structure Survey (since 2017: SER, before 2017: STATEC).

<sup>1</sup> One AWU is equivalent to a worker employed on a full time basis in one year. In Luxembourg it is as 2200 working hours per year (275 eight-hour working days).

\*Since 2002, employees of associated holdings are considered as family labour forces instead of non-family labour forces.

## 6. AGRICULTURAL PRODUCTION

### PART OF THE DIFFERENT PRODUCTIONS IN THE TOTAL VALUE OF THE AGRICULTURAL PRODUCTION 2019



**OUTPUT OF THE AGRICULTURAL INDUSTRY AT BASIC PRICES,  
INTERMEDIATE CONSUMPTION, GROSS VALUE ADDED AT BASIC PRICES,  
FACTOR INCOME (1000€, VAT EXCLUDED)**

	1990	2000	2010	2015	2017	2018	2019	2019/18 (%)
<b>Crop output (value at basic prices)</b>	80.543	86.465	141.385	168.916	154.442	165.775	157.634	95,1
Cereals (seeds included)	23.647	23.176	25.395	26.706	21.313	26.178	24.007	91,7
Industrial crops	2.266	3.461	5.477	5.489	4.385	4.314	3.915	90,8
Forage plants	22.620	19.331	77.144	100.043	98.978	95.585	96.155	100,6
Vegetables and horticultural products	5.047	4.455	5.186	5.642	5.484	6.957	8.659	124,5
Potatoes (seeds included)	3.128	3.190	4.957	2.606	3.447	3.697	2.568	69,5
Fruits	1.403	3.946	2.344	2.393	622	2.158	2.385	110,5
Wine	22.419	28.565	20.686	25.519	19.720	26.196	19.337	73,8
Other crop products	12	342	195	517	493	691	608	88,0
<b>Animal output (value at basic prices)</b>	164.001	156.186	164.968	198.111	235.765	228.763	245.528	107,3
<b>Animals</b>	63.897	72.697	77.137	93.098	95.712	88.214	98.061	111,2
Cattle	48.297	53.838	54.846	69.325	67.578	64.762	70.714	109,2
Pigs	14.849	17.412	20.532	22.070	26.446	21.687	25.636	118,2
Other animals	751	1.448	1.759	1.703	1.688	1.765	1.712	97,0
<b>Animal products</b>	100.104	83.488	87.831	105.013	140.053	140.549	147.466	104,9
Milk	97.977	81.708	84.316	99.790	134.619	134.606	140.977	104,7
Eggs	1.703	1.539	3.322	4.975	5.152	5.564	5.968	107,3
Other animal products	424	240	193	248	282	379	521	137,5

	1990	2000	2010	2015	2017	2018	2019	2019/18 (%)
<b>Agricultural services output and secondary activities (inseparable)</b>	9.187	13.577	27.760	37.251	38.877	40.623	39.265	96,7
<b>Output of the agricultural industry</b>	253.731	256.228	334.113	404.278	429.085	435.161	442.427	101,7
<b>Intermediate consumption</b>	127.432	135.055	236.833	303.573	308.386	309.606	316.841	102,3
<b>Gross value added at basic prices</b>	126.299	121.173	97.280	100.705	120.699	125.555	125.586	100,0
<b>Fixed capital consumption</b>	29.722	52.487	87.721	96.189	98.710	94.319	97.645	103,5
<b>Net value added at basic prices</b>	96.577	68.686	9.559	4.516	21.989	31.236	27.941	89,5
<b>Other taxes on production</b>	2.898	1.024	1.155	1.403	1.213	1.172	1.581	134,9
<b>Other subsidies on production</b>	15.642	29.063	65.178	74.578	68.819	67.979	69.005	101,5
<b>Factor income</b>	109.321	96.725	73.582	77.690	89.595	98.043	95.365	97,3

Source: SER

## QUANTITIES OF CROP PRODUCTS AND FORAGE PLANTS PRODUCED

Production (in tons)	1990	2000	2010	2015	2017	2018	2019
<b>Wheat and spelt</b>	43.511	61.184	83.474	91.058	77.781	78.409	80.822
Winter wheat	39.657	58.380	80.367	82.053	71.802	73.089	74.933
Spring wheat	3.854	1.893	1.731	4.431	2.432	1.666	1.575
Durum wheat	-	-	-	-	325	573	525
Spelt (until 99: included in winter wheat)	-	911	1.375	4.574	3.222	3.081	3.788
<b>Rye</b>	2.366	3.603	5.118	5.610	4.634	6.053	6.366
<b>Barley</b>	69.611	53.533	43.003	44.382	34.951	34.662	35.356
Winter barley	26.773	28.817	29.182	31.184	26.454	25.686	27.673
Spring barley	42.838	24.716	13.822	13.198	8.497	8.976	7.683
Brewing barley	-	2.991	2.785	1.134	1.166	1.171	966
<b>Oats</b>	18.757	9.217	4.789	5.879	5.920	6.977	7.008
<b>Mixed grains and others</b>	2.157	3.410	1.162	1.286	1.617	837	1.420
Mixed grains	-	-	917	929	1.028	486	1.209
Others	-	-	246	357	590	351	211
<b>Grain maize</b>	-	2.040	3.116	928	695	565	811
<b>Triticale</b>	11.037	19.843	25.523	27.373	23.691	26.738	28.239
<b>TOTAL CEREALS</b>	147.439	152.830	166.185	176.516	149.289	154.242	160.022

Production (in tons)	1990	2000	2010	2015	2017	2018	2019
<b>Dried pulses</b>	1.360	1.235	973	1.565	1.610	1.540	1.177
Peas	-	-	762	1.156	1.383	921	698
Beans	-	-	125	163	88	200	166
<b>Potatoes</b>	22.963	23.430	19.531	12.971	21.284	16.211	15.330
<b>Rapeseed</b>	5.348	8.370	15.895	13.834	11.317	10.951	9.777
<b>Forage plants (DM)</b>	-	298.941	280.177	259.940	343.921	303.192	289.389
Green maize (DM)	-	130.236	181.104	168.552	243.517	190.523	177.975
Temporary grass (DM)	-	162.483	95.129	79.127	84.969	95.296	93.961
<b>Grass seeds</b>	-	708	508	654	769	1.090	917
<b>Permanent pasture and meadows (DM)</b>	-	639.715	479.438	411.860	439.549	456.511	463.777

Source: SER  
DM = Dry matter



## QUANTITIES OF WINE PRODUCED BY GRAPE VARIETY (IN HL)

Variety	1990	2000	2010	2015	2017	2018	2019
<b>Elbling</b>	27.866	17.635	11.610	9.168	4.047	11.649	3.644
<b>Rivaner</b>	75.921	48.412	35.371	33.254	23.842	38.683	19.191
<b>Auxerrois</b>	17.004	15.789	17.470	16.355	12.011	21.941	8.767
<b>Chardonnay</b>	-	759	909	1.492	932	2.860	1.909
<b>Pinot blanc</b>	8.749	13.647	14.329	15.361	12.624	17.541	11.695
<b>Pinot gris</b>	7.265	13.316	12.991	14.700	11.569	17.941	11.611
<b>Pinot noir</b>	-	5.054	6.834	8.161	6.610	9.578	6.728
<b>Riesling</b>	13.207	16.406	9.914	10.734	9.021	13.554	7.301
<b>Gewürztraminer</b>	1.108	713	495	1.068	320	1.366	912
<b>Other</b>	624	200	325	401	273	793	79
<b>TOTAL</b>	151.744	131.931	110.248	110.694	81.248	135.907	71.837

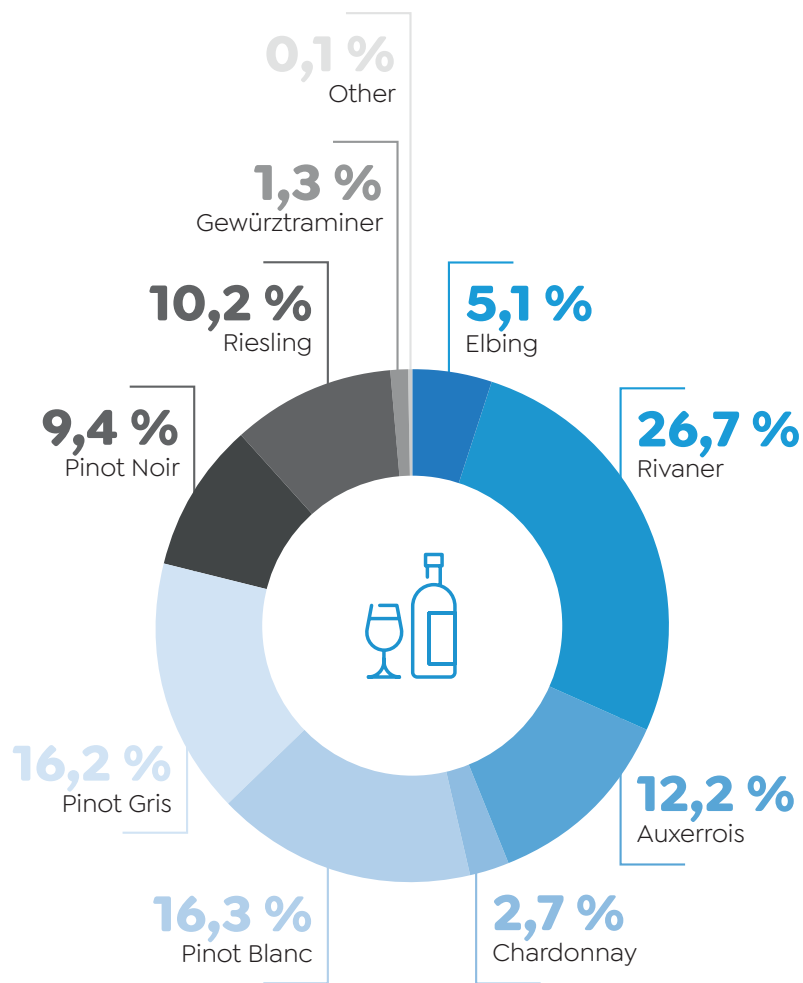
Source: IVV

## CULTIVATED AREA BY GRAPE VARIETY (IN HA)

Variety	1990	2000	2010	2015	2017	2018	2019
<b>Elbling</b>	235,98	162,06	105,10	85,30	78,50	72,20	68,60
<b>Rivaner</b>	570,90	443,94	336,70	308,00	299,00	288,80	276,60
<b>Auxerrois</b>	149,90	162,23	175,90	179,90	185,00	185,30	182,90
<b>Chardonnay</b>	-	7,94	16,20	23,40	29,70	34,80	40,10
<b>Pinot blanc</b>	81,04	133,77	138,30	155,80	156,70	157,50	159,60
<b>Pinot gris</b>	82,70	153,32	174,40	192,00	193,60	194,10	193,30
<b>Pinot noir</b>	-	62,36	93,60	116,50	121,80	123,10	124,60
<b>Riesling</b>	160,39	172,93	153,10	157,70	159,20	157,50	158,30
<b>Gewürztraminer</b>	7,77	11,11	18,90	21,00	20,80	20,40	20,40
<b>Other</b>	9,18	2,77	7,70	10,60	14,10	14,80	16,40
<b>TOTAL</b>	1.297,86	1.312,43	1.219,80	1.250,20	1.258,40	1.248,50	1.240,80

Source: IVV

## SHARE OF THE VARIOUS GRAPE VARIETIES IN TOTAL WINE PRODUCTION 2019



## QUANTITIES OF FRUIT AND VEGETABLES PRODUCED

Total harvest (in tons)	2010	2015	2016	2017	2018	2019
<b>TOTAL FRUITS</b>	2.852	3.081	2.106	1.257	2.594	2.377
<b>Pomaceous fruit</b>	2.664	2.882	2.052	1.202	2.379	2.163
Apples	2.406	2.419	1.510	983	2.077	1.932
thereof dessert apples	1.337	1.305	568	285	1.092	1.242
Pears	258	463	542	219	302	231
<b>Stone fruits</b>	146	150	23	23	175	181
Cherries	12	11	11	0	10	10
Plums	134	139	12	23	165	165
<b>Nuts</b>	24	26	25	26	30	6
Walnuts	24	26	25	26	30	25
<b>Strawberries</b>	17	19	3	4	8	6
<b>Berries</b>	1	4	3	3	2	2
<b>TOTAL VEGETABLES</b>	990	1.748	1.700	1.838	2.695	3.548
<b>Carrots</b>	230	557	552	644	404	634
<b>Celery root</b>	102	58	32	25	68	45
<b>Chicory</b>	25	44	38	15	15	15
<b>White cabbage</b>	57	136	117	250	780	860
<b>Gourds and pumpkins</b>	-	-	335	342	118	202
<b>Courgettes and marrows</b>	39	32	18	17	55	55
<b>Lettuce</b>	134	261	344	224	430	735
<b>Peas and beans</b>	42	77	16	14	23	32
<b>Onions</b>	40	120	70	115	298	727
<b>Leeks</b>	38	38	23	34	128	15
<b>Tomatoes*</b>	71	123	17	17	7	14
<b>Other vegetables</b>	211	301	139	140	370	216

Source: ASTA

\* Break in series, new survey method since 2016.

## PRODUCTION OF ANIMALS

	1985	1990	2000	2010	2015	2016	2017	2018	2019
<b>Total production of cattle<sup>1</sup></b>	14.195	14.024	17.030	16.257	15.984	15.190	15.788	15.746	14.816
<b>Slaughterings of calves<sup>2</sup></b>	34	140	475	252	201	205	185	191	225
<b>Export of calves alive (heads)</b>	23.742	17.707	16.625	14.698	18.135	19.115	22.153	22.214	23.258
<b>Total production of pigs<sup>1</sup></b>	6.870	8.402	11.710	15.142	15.625	16.802	16.907	16.239	14.962
<b>Slaughterings of piglets (heads)<sup>3</sup></b>	59.000	48.187	34.426	13.774	17.673	14.746	12.103	10.441	9.474
<b>Export of piglets alive (heads)</b>	-	-	19.584	17.383	18.116	12.252	8.417	5.605	1.562
<b>Slaughterings of sheep and goats<sup>2</sup></b>	51	73	119	172	193	184	175	178	174
<b>Slaughterings of poultry<sup>2</sup></b>	90	62	163	232	199	255	262	277	283

Own consumption is included for all productions.

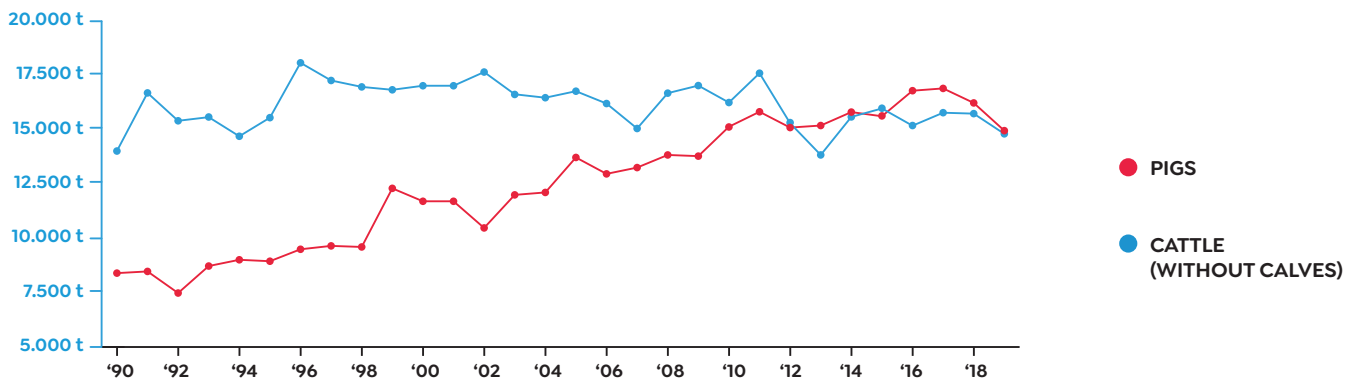
<sup>1</sup>Export and slaughtering of indigenous animals, including private slaughterings, in tons of carcass weight.

<sup>2</sup>Slaughtering of indigenous animals, including private slaughterings, in tons of carcass weight.

<sup>3</sup>Including private slaughterings, export of piglets alive included until 1997.

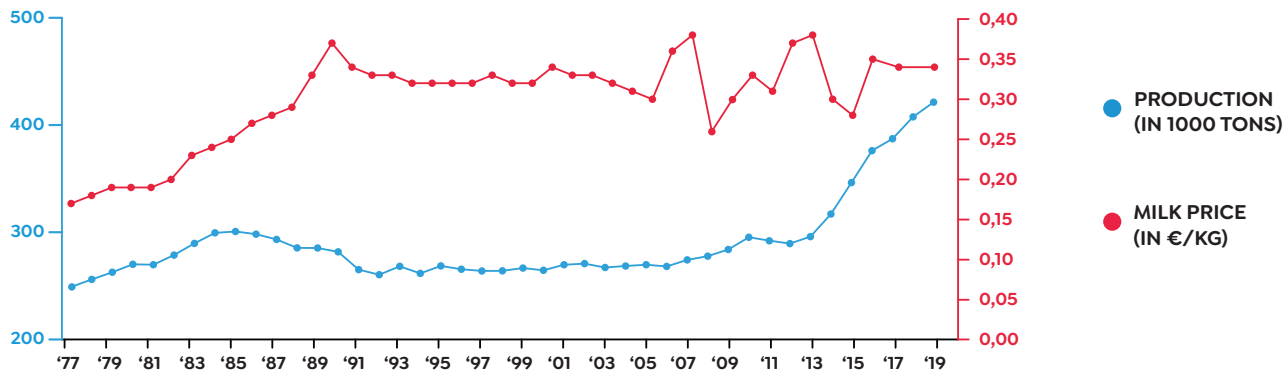
Source: SER

## TOTAL PRODUCTION OF CATTLE AND PIGS (WITHOUT CALVES AND PIGLETS)

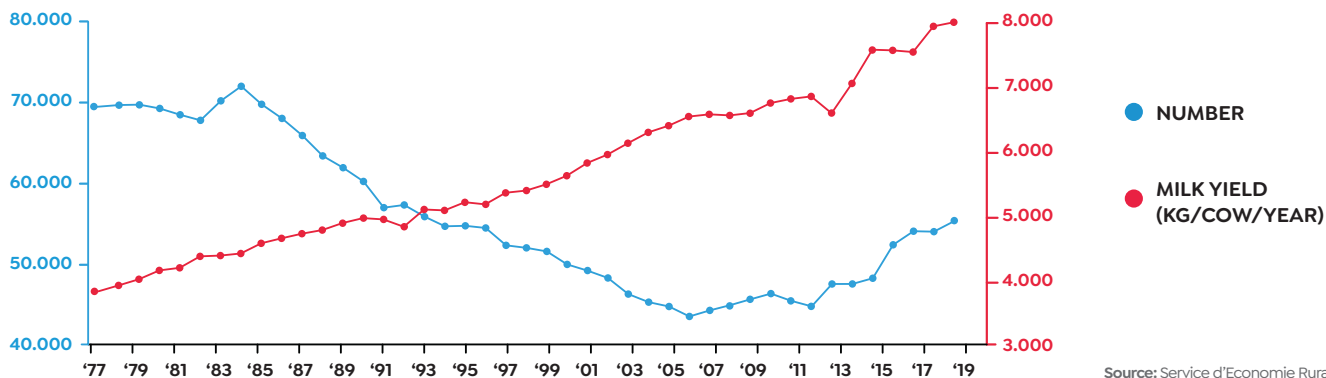


## MILK PRODUCTION

### MILK PRODUCTION AND PRODUCER PRICE FOR MILK



### NUMBER OF DAIRY COWS AND MILK YIELD PER COW



Source: Service d'Economie Rurale

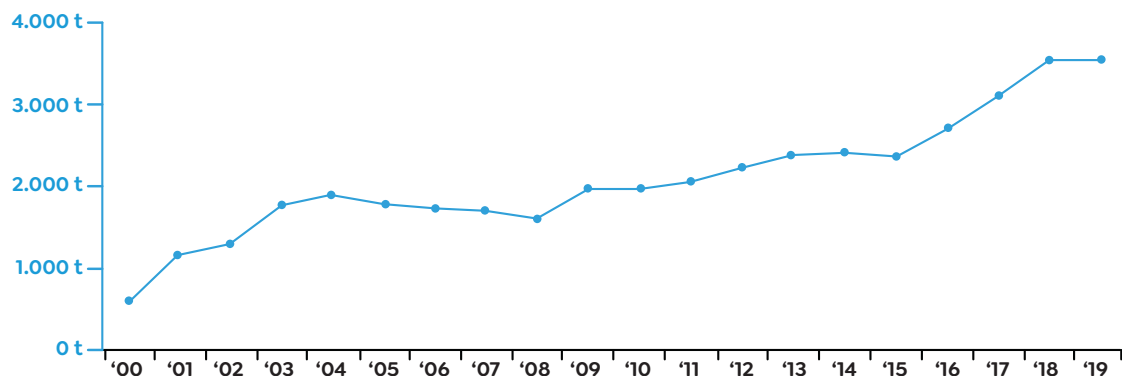
## TOTAL MILK PRODUCTION

Year	Milk production* (1000 tons)	Fat content (%)	Protein content (%)	Number of dairy cows	Milk yield per cow (kg/cow/year)
1980	270,1	3,91	-	67.830	3.982
1990	281,7	4,09	3,26	58.840	4.788
2000	264,5	4,19	3,36	48.607	5.441
2015	346,3	4,11	3,37	46.903	7.383
2016	376,1	4,12	3,39	51.025	7.373
2017	387,2	4,11	3,41	52.701	7.347
2018	407,6	4,12	3,43	52.645	7.743
2019	421,3	4,16	3,44	53.947	7.806

\* Contains dairy deliveries, direct marketing, self-consumption and feeding of calves.

## PRODUCTION OF ORGANIC MILK

	2000	2010	2015	2018	2019
Production (in tons)	577,0	1.944,4	2.357,4	3.524,4	3.520,8
Part of organic milk in milk production	0,22%	0,66%	0,68%	0,86%	0,84%





## 7. AGRICULTURAL PRICES

### PRICE INDICES (2015=100)

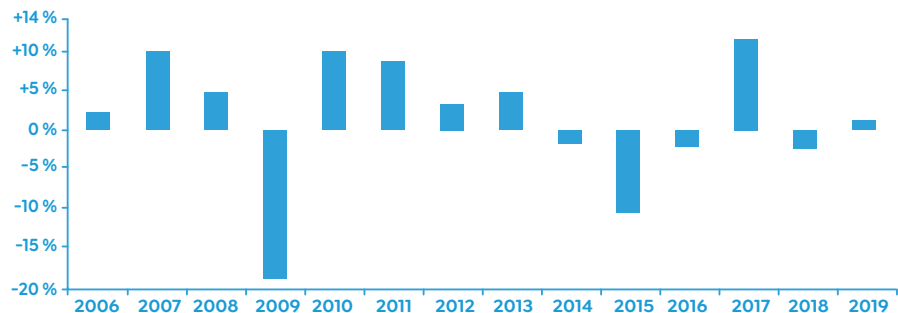
Description	2005	2010	2015	2016	2017	2018	2019
Cereals (including seeds)	66,4	96,1	100,0	88,8	95,2	113,3	101,0
Industrial crops	55,4	89,1	100,0	98,5	99,1	98,8	101,4
Vegetables and horticultural products	177,9	180,7	100,0	115,9	118,5	124,2	143,5
Potatoes (including seeds)	99,7	112,8	100,0	109,2	99,7	109,8	109,3
Fruits	74,0	90,7	100,0	102,5	106,2	104,0	104,7
Wine (including must)	86,0	90,4	100,0	102,1	102,2	102,2	103,3
Other crop products	52,3	86,9	100,0	99,8	101,7	97,9	97,5
<b>Cropt output</b>	<b>83,4</b>	<b>98,6</b>	<b>100,0</b>	<b>99,4</b>	<b>101,1</b>	<b>106,8</b>	<b>105,3</b>
<b>Animals</b>	83,4	90,3	100,0	103,0	104,5	101,3	103,7
Cattle	77,5	84,9	100,0	101,4	101,2	102,4	101,3
Pigs	96,7	103,3	100,0	107,6	113,4	98,7	110,5
Sheep and goats	99,5	113,5	100,0	101,8	101,8	104,7	101,1
Poultry	114,5	85,1	100,0	94,2	97,9	96,0	90,9
<b>Animal products</b>	100,8	100,0	100,0	93,5	117,1	111,3	113,4
Milk	101,8	100,5	100,0	93,2	118,0	111,7	113,7
Eggs	78,6	89,7	100,0	100,0	98,5	101,8	105,5
<b>Animal output</b>	<b>93,1</b>	<b>95,7</b>	<b>100,0</b>	<b>97,7</b>	<b>111,5</b>	<b>106,9</b>	<b>109,1</b>
<b>Agricultural goods output</b>	<b>91,1</b>	<b>96,3</b>	<b>100,0</b>	<b>98,0</b>	<b>109,4</b>	<b>106,9</b>	<b>108,3</b>



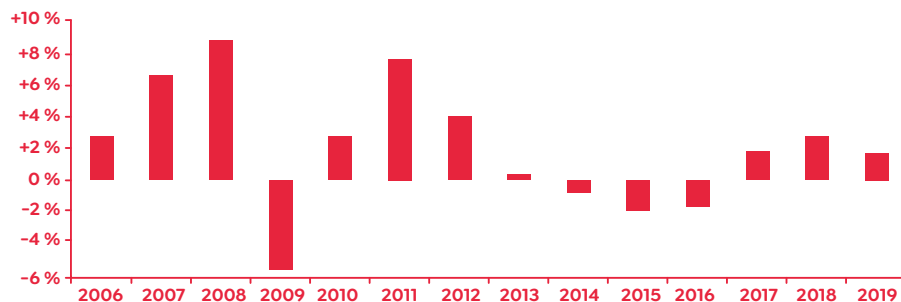
Description	2005	2010	2015	2016	2017	2018	2019
<b>Goods and services currently consumed in agriculture (Input 1)</b>	<b>78,0</b>	<b>91,3</b>	<b>100,0</b>	<b>96,2</b>	<b>97,3</b>	<b>101,0</b>	<b>102,1</b>
Seeds and planting stock	83,6	95,1	100,0	104,9	103,4	104,0	110,8
Energy, lubricants	85,0	106,5	100,0	88,5	97,2	112,0	111,9
Fertilisers and soil improvers	59,6	78,1	100,0	77,0	77,7	80,8	87,3
Plant protection products and pesticides	77,7	93,8	100,0	96,8	95,4	93,7	92,9
Veterinary expenses	106,4	102,7	100,0	98,6	98,1	97,1	96,7
Animal feed	70,1	86,0	100,0	97,9	98,1	103,0	102,1
Maintenance of materials	92,5	100,6	100,0	100,0	100,1	101,4	103,1
Maintenance of buildings	83,8	92,7	100,0	100,9	102,3	103,4	106,8
Other goods and services	78,1	87,8	100,0	100,9	102,0	103,2	104,7
<b>Goods and services contributing to agricultural investment (Input 2)</b>	<b>80,3</b>	<b>91,3</b>	<b>100,0</b>	<b>101,1</b>	<b>103,8</b>	<b>105,4</b>	<b>108,0</b>
Materials	78,6	92,4	100,0	101,6	103,7	106,3	108,4
Buildings	81,5	90,5	100,0	100,8	103,9	104,8	107,7
Other	82,3	91,0	100,0	101,6	103,3	105,1	108,0
<b>Input Total (Input 1 + Input 2)</b>	<b>79,0</b>	<b>91,3</b>	<b>100,0</b>	<b>98,5</b>	<b>100,3</b>	<b>103,0</b>	<b>104,8</b>
<b>Terms of Trade (output index / input index)</b>	<b>115,2</b>	<b>105,5</b>	<b>100,0</b>	<b>99,6</b>	<b>109,1</b>	<b>103,7</b>	<b>103,3</b>

Source: SER

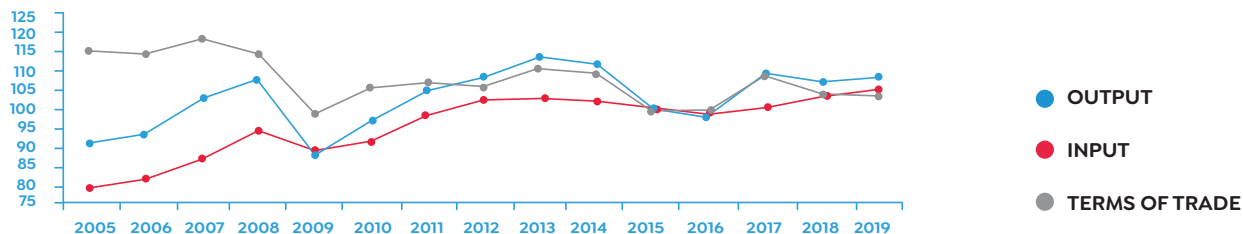
## ANNUAL CHANGE OF THE OUTPUT INDEX



## ANNUAL CHANGE OF THE INPUT INDEX



## ANNUAL EVOLUTION OF THE OUTPUT AND INPUT INDICES (BASE 2015=100)



## PRODUCER PRICES AT FARMGATE FOR AGRICULTURAL PRODUCTS (VAT EXCLUDED)

		1990	2000	2010	2015	2016	2017	2018	2019
<b>Breadmaking wheat</b>	€/100kg	17,65	13,10	17,27	15,91	14,90	15,37	18,40	16,11
<b>Feeding wheat</b>	€/100kg	14,50	10,13	13,00	14,74	12,43	13,68	16,33	14,59
<b>Spelt</b>	€/100kg	-	10,91	13,50	13,06	17,17	17,95	19,81	21,91
<b>Breadmaking rye</b>	€/100kg	16,24	9,54	14,25	14,21	14,23	14,20	18,31	14,43
<b>Feeding rye</b>	€/100kg	-	-	12,75	12,90	11,14	12,56	15,37	12,57
<b>Feeding barley</b>	€/100kg	14,50	9,48	12,50	14,17	11,26	12,53	15,17	13,31
<b>Malting barley</b>	€/100kg	17,60	11,53	12,75	18,15	16,00	:	15,82	14,86
<b>Oats</b>	€/100kg	14,01	10,16	9,50	11,73	13,18	12,58	14,13	13,45
<b>Grain maize</b>	€/100kg	-	11,90	16,22	15,45	17,75	16,00	15,50	16,50
<b>Triticale</b>	€/100kg	14,50	9,05	12,75	13,78	11,47	12,98	14,96	13,82
<b>Rapeseed for human consumption</b>	€/100kg	37,56	17,60	30,50	34,17	33,69	33,85	33,80	34,73
<b>Feeding peas</b>	€/100kg	24,05	11,16	13,00	16,90	16,08	17,39	14,85	16,83
<b>Field beans</b>	€/100kg	21,81	11,16	13,00	16,90	16,08	17,80	15,00	10,00
<b>Potatoes for human consumption</b>	€/100kg	16,73	16,11	35,36	31,20	30,03	24,28	33,70	26,41
<b>Cattle for slaughtering</b>	€/kg*	3,11	2,47	2,79	3,36	3,39	3,31	3,37	3,29
<b>Calves for slaughtering</b>	€/kg*	5,98	5,35	5,59	5,97	5,55	5,76	6,03	6,16
<b>Export calves (2 weeks old)</b>	€/Head	220,63	148,29	99,37	100,00	97,87	123,35	121,00	107,08
<b>Pigs for slaughtering</b>	€/kg*	1,72	1,43	1,26	1,33	1,42	1,50	1,31	1,53
<b>Piglets</b>	€/Head	52,06	35,23	42,29	49,50	49,16	47,74	40,76	43,89
<b>Milk (3,7% fat and 3,3% protein)</b>	€/kg	0,358	0,304	0,285	0,283	0,265	0,335	0,317	0,322
<b>Milk (effective fat and protein content)</b>	€/kg	0,365	0,320	0,299	0,297	0,280	0,354	0,336	0,343
<b>Eggs</b>	€/Egg	-	0,10	0,15	0,17	0,17	0,16	0,17	0,17

Source: SER

\*Carcass weight

## 8. ECONOMIC SITUATION OF THE AGRICULTURAL HOLDINGS

### THE ECONOMIC SITUATION

of the agricultural holdings in Luxembourg is raised through the farm accountancy data network (FADN).

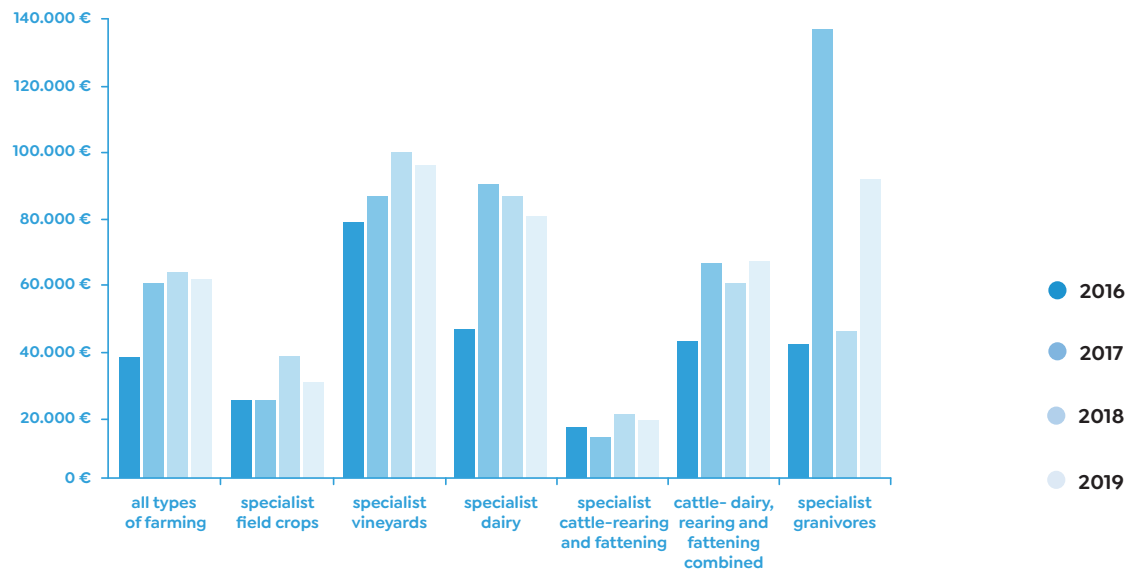
### THE FADN FIELD OF SURVEY

relates to main and secondary activity farms. The agricultural holdings are selected to be representative for each division of the holdings obtained by combination of type of farming and economic size class. The FADN sample for Luxembourg contains 618 farms (2018).

### THE FOLLOWING DIAGRAM

shows the evolution during the last years of the farm income per annual family work unit (AWUn) by type of farming.

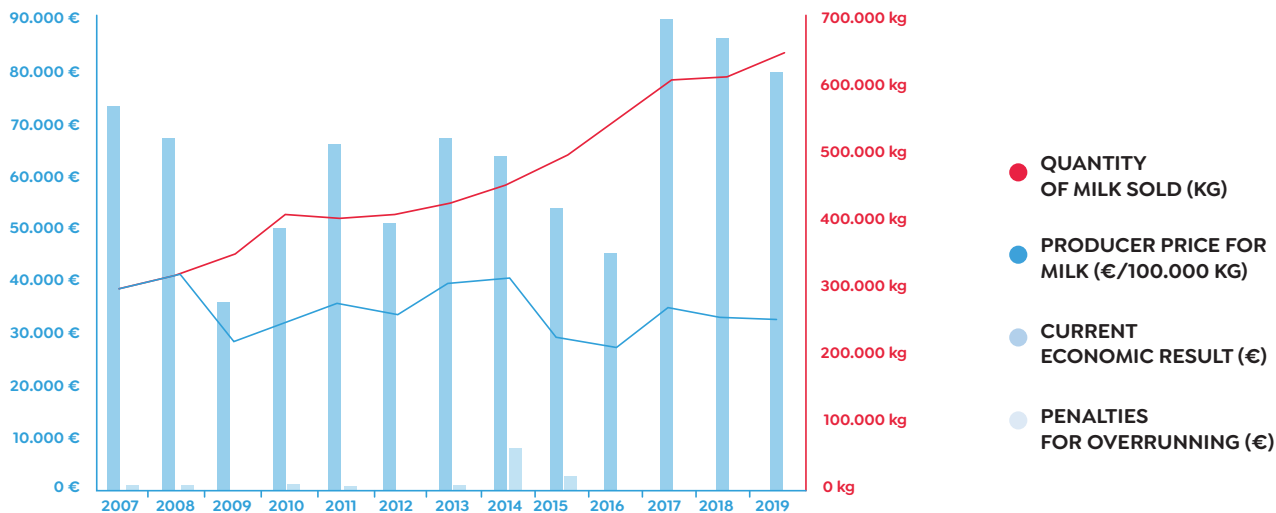
### EVOLUTION OF FARM INCOME PER AWUN BY TYPE OF FARMING



## THE CATEGORY

of the specialized dairy farms represents a large part of the commercial farms in Luxembourg. The following diagram shows the evolution of the producer price for milk, of the quantity of milk per farm sold by the specialized dairy farms, the current economic result of the farm and the penalties paid per farm for overrunning the milk quota allocated to the farm.

## EVOLUTION OF THE PRODUCER PRICE FOR MILK AND THE ECONOMIC INDICATORS IN THE SPECIALIZED DAIRY FARMS



## 9. EMISSIONS FROM AGRICULTURE

### THE GREENHOUSE GAS (GHG) EMISSIONS FROM THE AGRICULTURAL ACTIVITIES

#### IN 2018

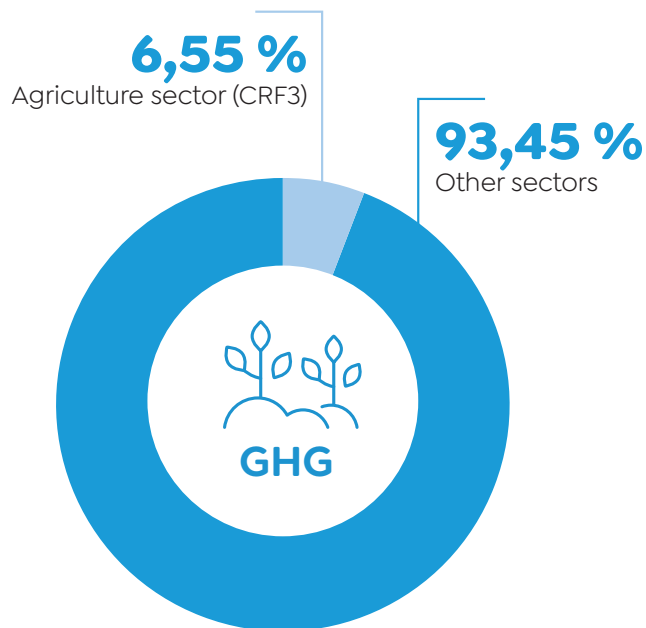
the agriculture sector (CRF 3) represented 6,55% of the total greenhouse gas emissions in Luxembourg, excluding LULUCF (land use, land use change and forestry).

**Source:** National Inventory Report, 2020 (version 27 may 2020). Luxembourg (<https://unfccc.int/documents/228020>).

### GHG-EMISSIONS FROM THE AGRICULTURE SECTOR

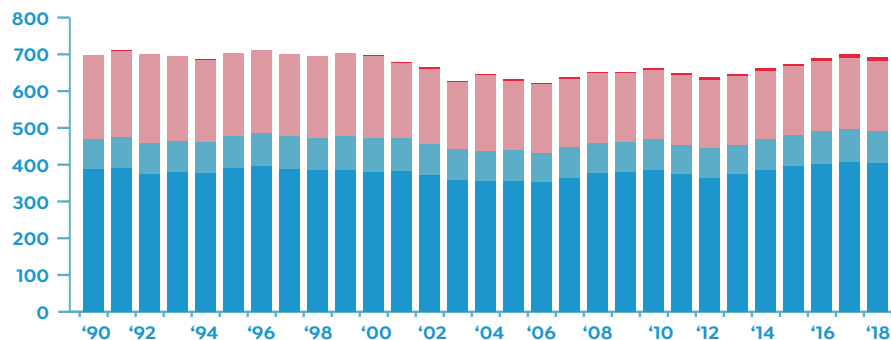
include emissions from the following source sectors:

- Methane emissions (**CH<sub>4</sub>**) from enteric fermentation (**3A**),
- Methane emissions (**CH<sub>4</sub>**) from animal manure management (**3Ba**),
- **N<sub>2</sub>O** Emissions from animal manure management (**3Bb**),
- **N<sub>2</sub>O** Emissions from managed soils (**3D**),
- **CO<sub>2</sub>** Emissions from liming (**3G**).



## THE EVALUATION OF GREENHOUSE GAS (GHG) EMISSIONS FROM 1990-2018 PER SOURCE

GHG emissions of the agricultural sector (CRF 3) in CO<sub>2</sub> eq. (Gg)/year



● METHANE EMISSIONS FROM ENTERIC FERMENTATION (3A)

● N<sub>2</sub>O EMISSIONS FROM MANAGED SOILS (3D)

● EMISSIONS FROM ANIMAL MANURE MANAGEMENT (3B)

● CO<sub>2</sub> EMISSIONS FROM LIMING (3G)

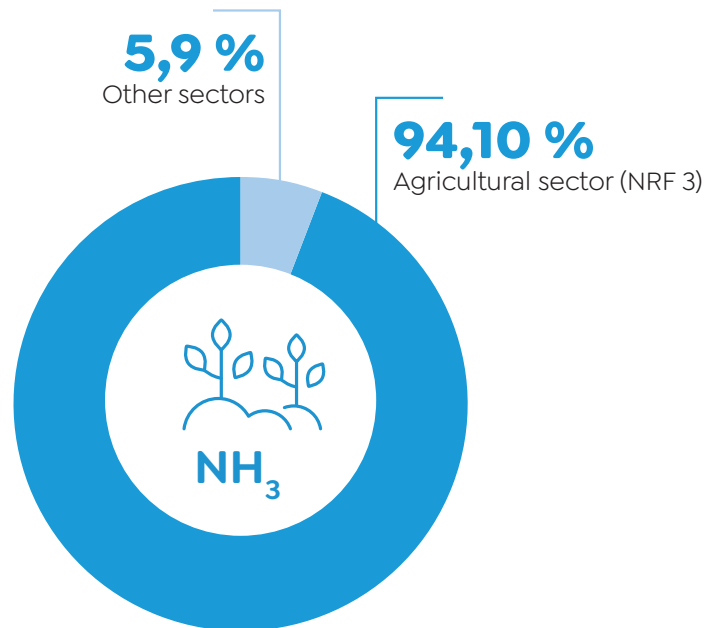
Source: National Inventory Report, 2020 (version 27 may 2020). Luxembourg (<https://unfccc.int/documents/228020>).



## THE AMMONIA EMISSIONS (NH<sub>3</sub>) FROM THE AGRICULTURAL SECTOR

**IN 2018,**  
the national ammonia NH<sub>3</sub> emissions amounted to 5,9 Gg,  
whereof 94,1% from the agricultural sector.

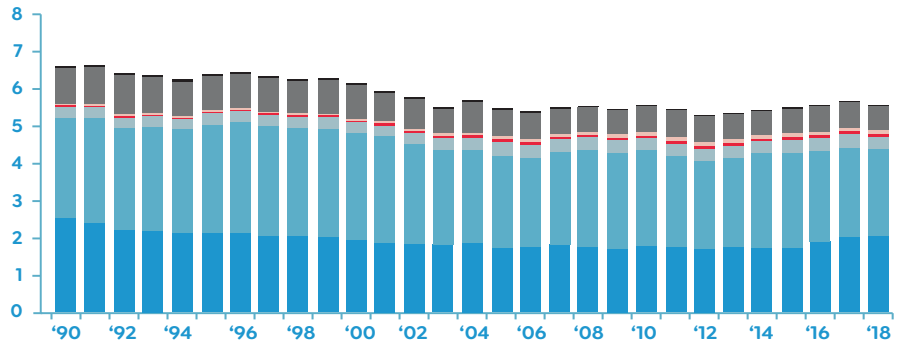
**Source:** Luxembourg's Informative Inventory Report 1990-2018, 2020  
(version 22 june 2020).  
(<https://www.ceip.at/status-of-reporting-and-review-results/2020-submissions>).





# OVERVIEW OF THE AMMONIA EMISSIONS (NH<sub>3</sub>) FROM THE AGRICULTURAL SECTOR (NRF 3) FOR THE PERIOD 1990-2018 PER SOURCE

Ammonia emissions (NH<sub>3</sub>) in Gg/Year



- DAIRY COWS\*
- CATTLE OTHER THAN DAIRY COWS\*
- SWINE\*
- POULTRY\*
- HORSES\*
- SYNTHETIC N FERTILISER
- SEWAGE SLUDGE & COMPOST
- SMALL RUMINANTS\*
- OTHER ANIMALS\*

\*NH<sub>3</sub> emissions that occur in the stable and when handling animal manure (including spreading and grazing).

Source: Luxembourg's Informative Inventory Report 1990-2018, 2020 (version 22 June 2020).  
Luxembourg (<https://www.ceip.at/status-of-reporting-and-review-results/2020-submissions>).



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LE GOUVERNEMENT  
DU GRAND-DUCHÉ DE LUXEMBOURG  
Ministère de l'Agriculture, de la Viticulture  
et du Développement rural