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## Aquaculture: 2018

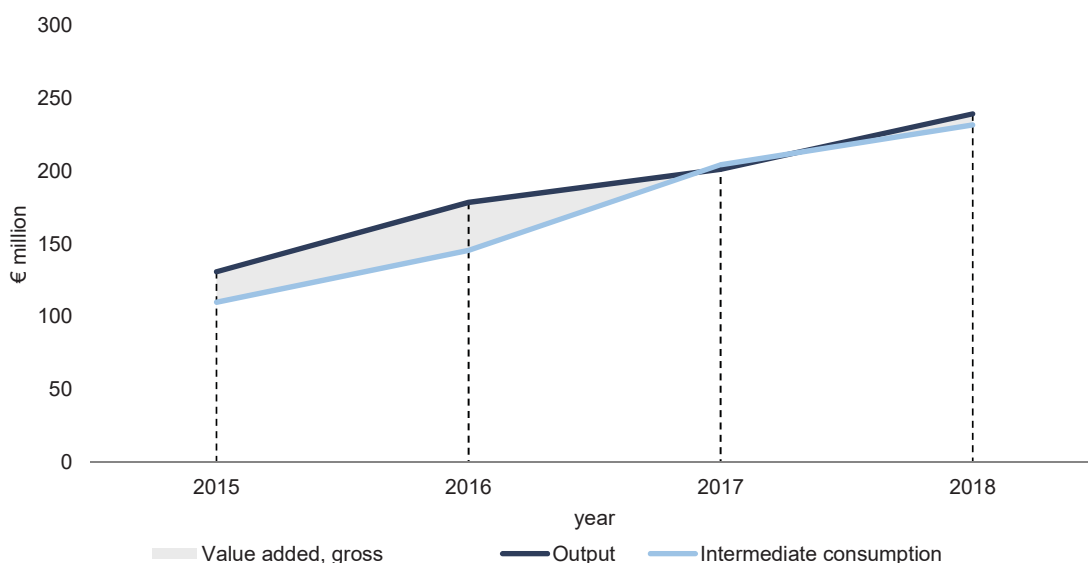
The annual census conducted amongst enterprises operating in the local aquaculture industry shows that the combined output generated by the farming of Tuna and closed cycle species amounted to €239.2 million, up by €38.0 million or 18.9 per cent over 2017. On the other hand, the intermediate consumption, which comprises the main expenses incurred by the industry, increased by €27.3 million or 13.4 per cent over that registered in 2017. As a result, the industry's gross value added stood at €7.6 million.

The gross fixed capital consumption of assets held by the aquaculture industry increased by €2.2 million to a total of €4.2 million, while compensation of employees rose by €3.7 million, reaching €8.6 million. Overall, the industry registered a net operating loss of €5.2 million (Table 1).

In volume terms, the total sales of fish amounted to 19,291 tonnes, an increase of 22.7 per cent over the preceding year. The marketed tonnage of Tuna accounted for 89.8 per cent of the total sales; up from an 83.5 per cent share recorded in 2017. This was also reflected in the tonnage of sold Tuna which rose by 32.1 per cent over the relative quantity sold a year before. In terms of value, the total marketed amount of farmed fish rose by €62.3 million or 34.5 per cent to a total of €242.7 million (Table 2).

On the expenditure side, purchases of live Tuna and fingerlings amounted to €109.9 million, an increase of €8.8 million or 8.7 per cent over 2017. This accounted for 47.5 per cent of the entire intermediate consumption recorded by the industry. Similarly, variable production costs increased by 16.6 per cent over 2017 as a result of higher expenses related to fish feed supplies, insurance and licences fees as well as other variable costs respectively. Moreover, further increases of 39.1 per cent and 17.2 per cent were registered in selling costs and overheads respectively (Table 3) ■

**Chart 1. Output and intermediate consumption of the aquaculture industry**



**Table 1. Value added of the aquaculture industry**

	2015	2016	2017	2018 <sup>P</sup>
<b>Number of fish farms</b>	5	6	7	7
				€ million
<b>Output</b>	130.8	178.4	201.2	239.2
of which:				
Tuna farming	111.1	152.5	168.4	228.6
Closed cycle species <sup>1</sup>	16.8	11.5	12.0	14.1
Change in stocks	2.5	10.0	18.3	-7.1
Other output	0.4	4.5	2.5	3.6
Less intermediate consumption	109.9	145.6	204.3	231.6
<b>Value added, gross</b>	20.9	32.8	-3.1	7.6
Less consumption of fixed capital	1.6	1.3	2.0	4.2
<b>Value added, net</b>	19.3	31.5	-5.2	3.4
Less compensation of employees	4.0	3.8	4.9	8.6
Less taxes on production <sup>2</sup>	0.0	0.0	0.0	0.0
Add subsidies on production	0.0	0.0	0.0	0.0
<b>Operating surplus, net</b>	15.3	27.6	-10.1	-5.2

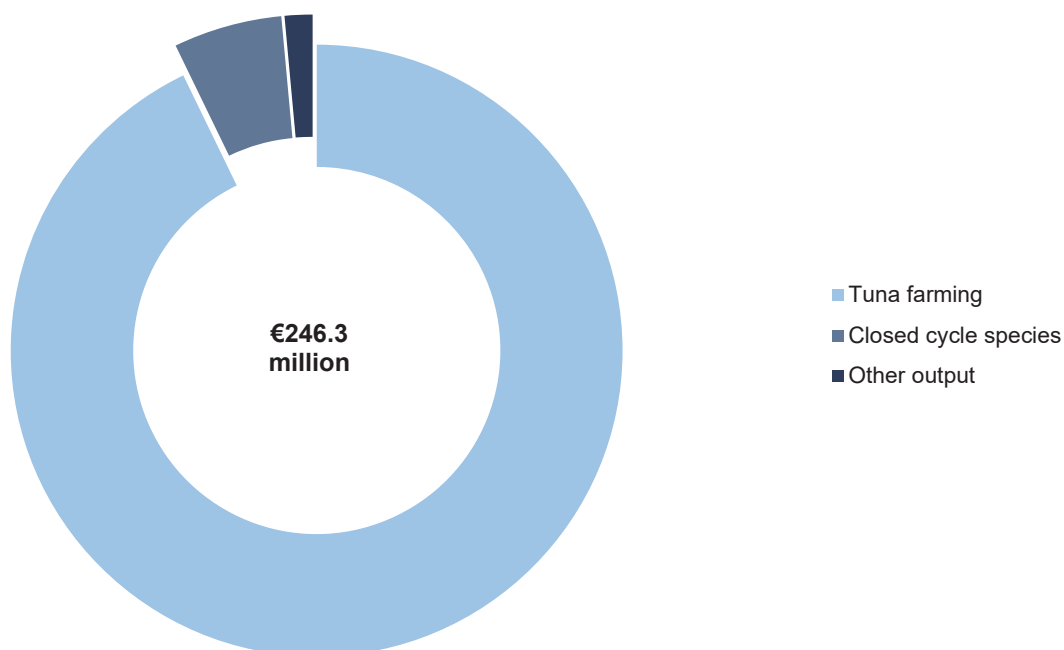
<sup>P</sup>provisional

<sup>1</sup> Closed cycle species refer to Gilthead seabream, European seabass, Meagre and Amberjack.

<sup>2</sup> Caging fees and/or corporate taxes incurred by the industry are, by methodology, not accounted for under this item.

Note: Figures may not add up due to rounding.

**Chart 2. Percentage distribution of selected aquaculture output: 2018**



**Table 2. Sales and purchases of fish**

	2015	2016	2017	2018 <sup>P</sup>	2016/2015	2017/2016	2018/2017
					Percentage change		
<b>Sales of fish</b>							
<b>Kg (000)</b>	<b>10,800</b>	<b>13,656</b>	<b>15,721</b>	<b>19,291</b>	<b>26.4</b>	<b>15.1</b>	<b>22.7</b>
<b>€ (000)</b>	<b>127,925</b>	<b>164,013</b>	<b>180,402</b>	<b>242,684</b>	<b>28.2</b>	<b>10.0</b>	<b>34.5</b>
Tuna							
Kg (000)	8,051	11,292	13,120	17,326	40.3	16.2	32.1
€ (000)	111,089	152,501	168,356	228,583	37.3	10.4	35.8
Gilthead seabream							
Kg (000)	2,337	2,221	2,458	1,779	-5.0	10.7	-27.6
€ (000)	11,864	10,330	10,900	10,456	-12.9	5.5	-4.1
European seabass							
Kg (000)	27	39	59	77	43.7	52.9	29.3
€ (000)	189	256	434	522	35.5	69.4	20.4
Other							
Kg (000)	385	104	83	110	-73.0	-20.0	31.8
€ (000)	4,783	925	712	3,122	-80.7	-23.0	338.5
<b>Purchases of fish</b>							
<b>Kg (000)</b>	<b>4,905</b>	<b>6,415</b>	<b>8,632</b>	<b>9,293</b>	<b>30.8</b>	<b>34.6</b>	<b>7.7</b>
<b>€ (000)</b>	<b>58,735</b>	<b>67,083</b>	<b>101,069</b>	<b>109,888</b>	<b>14.2</b>	<b>50.7</b>	<b>8.7</b>
Tuna							
Kg (000)	4,887	6,393	8,615	9,269	30.8	34.8	7.6
€ (000)	57,597	66,040	99,835	108,465	14.7	51.2	8.6
Closed cycle species							
Kg (000)	18	22	17	24	18.6	-23.3	45.0
€ (000)	1,138	1,042	1,234	1,423	-8.4	18.3	15.3

<sup>P</sup>provisional

Notes:

1. Other includes Meagre and Amberjack.
2. Closed cycle species refer to Gilthead seabream, European seabass, Meagre and Amberjack.
3. Figures may not add up due to rounding.

**Chart 3. Distribution of sales by fish species and year**

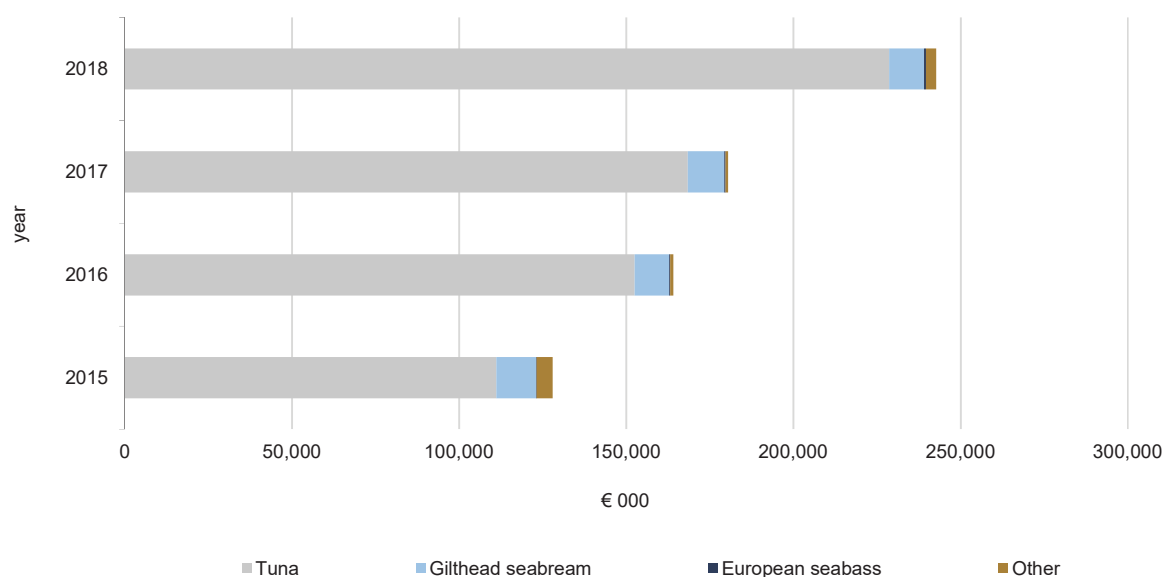


Table 3. Intermediate consumption by type of expenditure

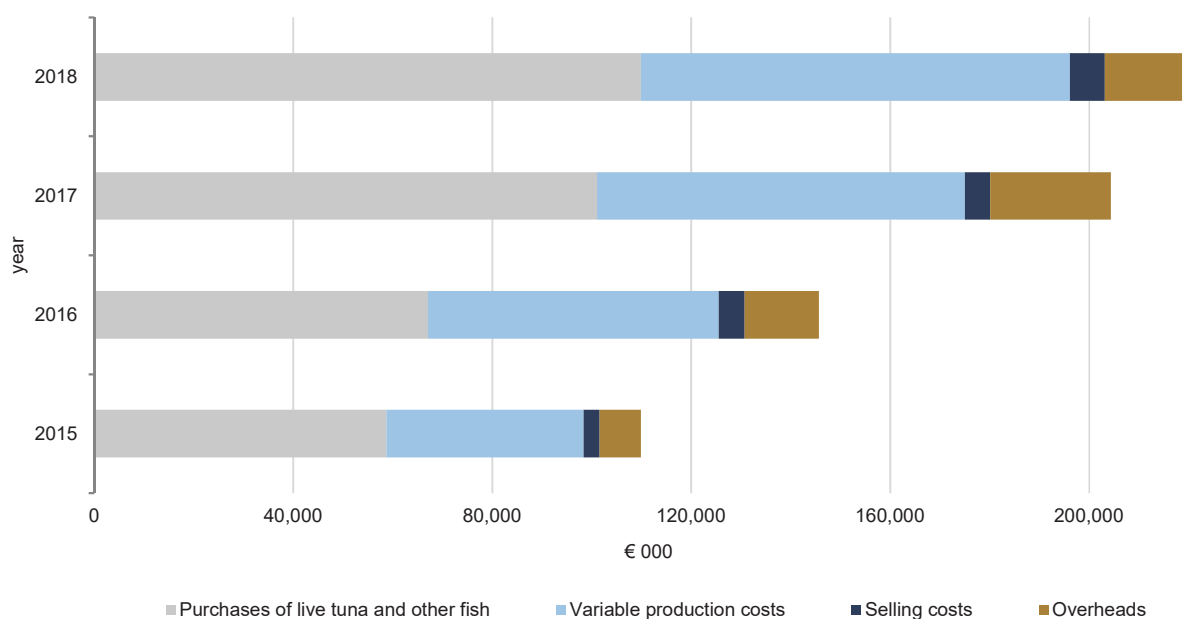
	2015	2016	2017	2018 <sup>P</sup>	2016/2015	2017/2016	2018/2017
	€ (000)				Percentage change		
<b>Total intermediate consumption</b>	<b>109,888</b>	<b>145,627</b>	<b>204,311</b>	<b>231,562</b>	<b>32.5</b>	<b>40.3</b>	<b>13.3</b>
<b>Purchases of live Tuna and other fish</b>	<b>58,735</b>	<b>67,083</b>	<b>101,069</b>	<b>109,888</b>	<b>14.2</b>	<b>50.7</b>	<b>8.7</b>
Tuna	57,597	66,040	99,835	108,465	14.7	51.2	8.6
Closed cycle species	1,138	1,042	1,234	1,423	-8.4	18.3	15.3
<b>Variable production costs</b>	<b>39,650</b>	<b>58,403</b>	<b>73,951</b>	<b>86,234</b>	<b>47.3</b>	<b>26.6</b>	<b>16.6</b>
Maintenance and repairs	2,144	2,090	4,120	4,674	-2.5	97.1	13.5
Purchase of fish feed	30,009	41,068	49,859	56,685	36.9	21.4	13.7
Insurances and licences	1,777	1,589	1,810	2,945	-10.6	13.9	62.7
Fuel	1,613	2,245	2,111	3,153	39.2	-6.0	49.4
Other variable production costs	4,106	11,411	16,051	18,777	177.9	40.7	17.0
<b>Selling costs</b>	<b>3,187</b>	<b>5,264</b>	<b>5,029</b>	<b>6,996</b>	<b>65.2</b>	<b>-4.5</b>	<b>39.1</b>
Packaging	459	442	443	488	-3.6	0.3	10.2
Air freight	215	296	320	238	37.6	8.1	-25.6
Other selling costs	2,513	4,526	4,266	6,269	80.1	-5.8	47.0
<b>Overheads</b>	<b>8,317</b>	<b>14,878</b>	<b>24,262</b>	<b>28,444</b>	<b>78.9</b>	<b>63.1</b>	<b>17.2</b>
Accounting fees	47	39	38	57	-17.0	-2.7	49.5
Environmental monitoring	50	59	45	45	19.7	-23.5	-1.4
Contractual work	5,978	11,245	19,909	24,197	88.1	77.1	21.5
Other fixed costs	2,241	3,534	4,269	4,145	57.7	20.8	-2.9

<sup>P</sup>provisional

Notes:

1. Closed cycle species refer to Gilthead seabream, European seabass, Meagre and Amberjack.
2. Figures may not add up due to rounding.

Chart 4. Distribution of intermediate consumption by type and year



## Methodological Notes

1. The aim of this release is to provide a complete overview of the structure, production and intermediate consumption of the aquaculture industry at a particular point in time through a survey of all the fish farms operating in Malta.
2. The data collected is in line with Regulation (EC) No 762/2008 of the European Parliament and of the Council of 9 July 2008 regarding the submission by each Member State of statistics on aquaculture; thus repealing Council Regulation (EC) No 788/96 of 22 April 1996 and also with Appendix X of the Commission Decision (2010/93/EU) of the 18 December 2009.
3. The data was collected by means of an exhaustive survey through which all the fish farms were asked to submit information on their structures and economic activity. The data requested from each fish farm consisted of the number, surface area and volume of cages utilised, purchases and sales of fish in weight and in value, opening and closing valuation of stocks at a particular point in time and the expenses incurred in the production of farmed fish. All fish farms cooperated and responded to the survey.
4. The figures in this news release are considered as provisional and subject to any revision that the Office may deem as necessary.

### 5. Definitions:

- **Aquaculture industry** which is entirely dependent on marine resources, has two sectors:
  - Tuna farming which relies on captured wild fish and is referred to as "Capture Based Species" (CBS); and
  - the farming of "closed cycle species" (CCS) such as Gilthead seabream, European seabass, Meagre and Amberjack that are cultured from eggs produced in hatcheries.
- **Change in stocks** is the difference between the closing stock of the species as at 31st December and the opening stock as at 1st January.
- **Intermediate consumption** represents the value of almost all goods and services used as inputs in the production process with the exception of some items which by methodology are classified elsewhere.
- **Gross value added** of the aquaculture industry is the value of output less the intermediate consumption.
- **Consumption of fixed capital** is the decline in value of fixed assets owned, as a result of normal wear and tear and obsolescence during an accounting period.
- **Compensation of employees** is the total remuneration, in cash or in kind, payable by an employer to an employee in return for work done by the latter during an accounting period.

6. More information relating to this news release may be accessed at:

Sources and Methods:

[https://nso.gov.mt/en/nso/Sources\\_and\\_Methods/Unit\\_B3/Environment\\_Energy\\_Transport\\_and\\_Agriculture\\_Statistics/Pages/Aquaculture.aspx](https://nso.gov.mt/en/nso/Sources_and_Methods/Unit_B3/Environment_Energy_Transport_and_Agriculture_Statistics/Pages/Aquaculture.aspx)

Statistical concepts: <http://nso.gov.mt/metadata/concepts.aspx>

7. References to this news release are to be cited appropriately.

8. A detailed news release calendar is available on:

[https://nso.gov.mt/en/News\\_Releases/Release\\_Calendar/Pages/News-Release-Calendar.aspx](https://nso.gov.mt/en/News_Releases/Release_Calendar/Pages/News-Release-Calendar.aspx)