## HELLENIC REPUBLIC <br> HELLENIC STATISTICAL AUTHORITY

## PRESS RELEASE AQUACULTURE SURVEY, 2016

The Hellenic Statistical Authority (ELSTAT) announces the results of the Survey on Aquaculture for the reference year 2016.

## A. QUANTITY AND VALUE OF REARED OR CULTIVATED SPECIES

The changes in the quantity and value of the reared or cultivated species, by main group, in Greece total, are as follows:

- Fish: in 2016 compared with 2015 , an increase of $11.9 \%$ was recorded in the quantity of fish and an increase of $9.9 \%$ in the corresponding value, while in 2015 compared with 2014, there was an increase of $1.8 \%^{*}$ and $7.8 \%^{*}$ in the quantity of fish and the corresponding value, respectively. More specifically, $99,997.8$ tonnes of fish with a total value of $516,660.8$ thousand euro were farmed in 2016, 89,334.9* tonnes of fish with a total value of 469,968.0*thousand euro in 2015 and $87,761.0$ tonnes of fish with a total value of $436,072.3$ thousand euro in 2014 (Table 1, Graph 1a),
- Molluscs and Crustaceans: in 2016 compared with 2015, the quantity of molluscs / crustaceans recorded an increase of $24.8 \%$ and the corresponding value increased by $23.1 \%$, while in 2015 compared with 2014, there was an increase of $11.8 \%$ and $8.0 \%$ in the quantity and value, respectively. More specifically, $23,321.0$ tonnes of molluscs / crustaceans with a total value of $8,480.4$ thousand euro were farmed in $2016,18,680.2$ tonnes with a total value of $6,889.1$ thousand euro in 2015 and 16,701.2 tonnes of molluscs / crustaceans with a total value of 6,378.0 thousand euro in 2014 (Table 1, Graph 1b).

Table 1. Quantity and value of reared or cultivated species, 2014-2016

|  | 2014 |  | 2015 |  | 2016 |  | $\begin{aligned} & \text { Change(\%) } \\ & \text { 2015/2014 } \end{aligned}$ |  | $\begin{aligned} & \text { Change (\%) } \\ & \text { 2016/2015 } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reared or Cultivated species | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value |
| Grand Total | 104,481.3 | 443,342.3 | *108,032.1 | *477,503.9 | 123,332.2 | 525,667.0 | *3.4 | *7.7 | 14.2 | 10.1 |
| Fish | 87,761.0 | 436,072.3 | *89,334.9 | *469,968.0 | 99,997.8 | 516,660.8 | *1.8 | *7.8 | 11.9 | 9.9 |
| Flathead grey mullet | 263.5 | 609.7 | 251.0 | 628.3 | 314.7 | 651.5 | -4.7 | 3.1 | 25.4 | 3.7 |
| European seabass | 32,141.5 | 172,921.2 | *36,600.1 | *199,871.4 | 42,556.6 | 235,046.3 | *13.9 | *15.6 | 16.3 | 17.6 |
| Shi drum | 461.9 | 2,737.5 | *475.6 | *2,663.6 | 127.6 | 667.5 | *3.0 | *-2.7 | -73.2 | -74.9 |
| Sheepshead bream | 530.3 | 2,778.0 | *202.0 | *1,125.3 | 144.6 | 839.1 | -61.9 | -59.5 | -28.4 | -25.4 |
| Trout | 1,611.4 | 5,030.4 | 1,758.7 | *5,521.2 | 1,644.3 | 5,077.9 | 9.1 | *9.8 | -6.5 | -8.0 |
| Gilthead seabream | 50,688.2 | 239,563.3 | *47,713.3 | *246,551.1 | 49,265.3 | 240,519.9 | *-5.9 | *2.9 | 3.3 | -2.4 |
| Red porgy | 711.3 | 4,705.2 | *781.6 | *4,918.1 | 3,041.2 | 16,570.5 | *9.9 | *4.5 | 289.1 | 236.9 |
| Eel | 284.8 | 2,580.3 | 322.1 | 2,779.5 | 473.6 | 4,869.3 | 13.1 | 7.7 | 47.0 | 75.2 |
| Other fish | 1,068.1 | 5,146.7 | *1,230.4 | *5,909.4 | 2,430.0 | 12,418.9 | *15.2 | *14.8 | 97.5 | 110.2 |
| Molluscs and Crustaceans | 16,701.2 | 6,378.0 | 18,680.2 | 6,889.1 | 23,321.0 | 8,480.4 | 11.8 | 8.0 | 24.8 | 23.1 |
| Mussels | 16,678.4 | 6,362.1 | 18,628.4 | 6,848.9 | 23,288.6 | 8,449.5 | 11.7 | 7.7 | 25.0 | 23.4 |
| Other | 22.8 | 15.9 | 51.8 | 40.2 | 32.4 | 31.0 | 127.2 | 152.8 | -37.5 | -22.9 |
| Aquatic plants Seaweeds | 12.6 | 510.0 | 14.8 | 560.1 | 9.6 | 383.0 | 17.5 | 9.8 | -35.1 | -31.6 |
| Spirulina | 12.6 | 510.0 | 14.8 | 560.1 | 9.6 | 383.0 | 17.5 | 9.8 | -35.1 | -31.6 |
| Fish eggs | 6.5 | 382.0 | 2.3 | 86.7 | 3.7 | 142.8 | -64.6 | -77.3 | 60.9 | 64.7 |
| Flathead grey mullet | 6.5 | 382.0 | 2.3 | 86.7 | 3.7 | 142.8 | -64.6 | -77.3 | 60.9 | 64.7 |

*Revised data

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Graph 1a: Quantity and value of fish, 2014-2016


Graph 1b: Quantity and value of molluscs / crustaceans, 2014-2016


The changes in the quantity and value of the farmed or cultivated fish species, by type of water, are as follows:

- Fresh water: in2016 compared with 2015, there was a decrease of $1.5 \%$ in fish quantity and an increase of $9.6 \%$ in the corresponding value, while in 2015 compared with 2014, there was an increase of $7.3 \%$ and $4.5 \%^{*}$ in fish quantity and value, respectively. More specifically, 2,071.0 tonnes of fish with a total value of $9,853.3$ thousand euro were farmed in 2016 2,101.6 tonnes of fish with a total value of 8,986.9* thousand euro in 2015 and 1,959.2 tonnes with a total value of 8,603.3 thousand euro in 2014 (Table 2),
- Brackish water: in 2016 compared with 2015, there was an increase of $25.6 \%$ in fish quantity and an increase of $20.2 \%$ in the corresponding value, while in 2015 compared to 2014, there was a decrease of $1.6 \%^{*}$ and $18.1 \%^{*}$ in fish quantity and value, respectively. More specifically, 970.5 tonnes of fish with a total value of $3,347.5$ thousand euro were farmed in 2016, 772.6* tonnes of fish with a total value of 2,783.9* thousand euro in 2015 and 784.9 tonnes of fish with a total value of 3,399.3 thousand euro in 2014 (Table 2),
- Sea water: in 2016 compared with 2015, there was an increase of $14.4 \%$ in fish quantity and a $10.0 \%$ increase in the corresponding value, while in 2015 compared to 2014, there was an increase of $3.4 \%^{*}$ and $8.0 \%$ in fish quantity and value, respectively. More specifically, $120,290.7$ tonnes of fish with a total value of $512,466.3$ thousand euro were farmed in 2016, 105,157.9* tonnes of fish with a total value of 465,733.1* thousand euro in 2015 and 101,737.3 tonnes of fish with a total value of 431,339.7 thousand euro in 2014 (Table 2).

Table 2. Quantity and value of aquaculture production, by type of water, 2014-2016
Quantity in tonnes, Value in thousand euro

| Water Type | 2014 |  | 2015 |  | 2016 |  | 2015/2014 |  | 2016/2015 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value |
| Fresh | 1,959.2 | 8,603.3 | 2,101.6 | *8,986.9 | 2,071.0 | 9,853.3 | 7.3 | *4.5 | -1.5 | 9.6 |
| Brackish | 784.9 | 3,399.3 | 772.6 | *2,783.9 | 970.5 | 3,347.5 | *-1.6 | *-18.1 | 25.6 | 20.2 |
| Sea | 101,737.3 | 431,339.7 | *105,157.9 | *465,733.1 | 120,290.7 | 512,466.3 | *3.4 | *8.0 | 14.4 | 10.0 |

## *Revised data

## B. PRODUCTION OF FISH LARVA IN HATCHERIES AND NURSERIES

The changes in the produced quantity of fish larva, by species in Greece (total), are as follows:

- Overall production of fish larva: the quantity of fish larva in 2016 increased by $8.5 \%$ compared with to 2015, in relation to an increase of $0.4 \%^{*}$ recorded in 2014/2013. More specifically, fish larva amounted to 435,224 thousand juveniles in 2016, 401,253* thousand juveniles in 2015 and 399,574 thousand juveniles in 2014 (Table 3).
More specifically, as regards the main species:
- European seabass: the quantity of larva in 2016 recorded an increase of $5.4 \%$ compared with 2015 , in relation to a decrease of $10.6 \%^{*}$ recorded for 2015/2014. More specifically, european seabass larva amounted to 163,316 thousand juveniles in 2016, 154,915* thousand juveniles in 2015 and 173,346 thousand juveniles in 2014 (Table 3, Graph 2),
- Gilthead seabream: the quantity of larva in 2016 recorded an increase of $11.2 \%$ compared with 2015, in relation to an increase of 9.5\%* recorded for 2015/2014. More specifically, gilthead sea bream larva amounted to 258,137 thousand juveniles in 2016, 232,221* thousand juveniles in 2015 and 212,046 thousand juveniles in 2014 (Table 3, Graph 2),
- Trout: the quantity of larva in 2016 recorded a decrease of $7.6 \%$ compared with 2015 , in relation to a decrease of $1.8 \%$ recorded for 2015/2014. More specifically, trout larva amounted to 6,947 thousand juveniles in 2016, 7,518 thousand juveniles in 2015 and 7,655 thousand juveniles in 2014 (Table 3, Graph 2),
- Other fish: the quantity of larva for 2016 recorded an increase of $3.4 \%$ compared with 2015 , in relation to an increase of $1.1 \%$ recorded for 2015/2014. More specifically, other fish larva amounted to 6,824 thousand juveniles in 2016, 6,599 thousand juveniles in 2015 and 6,527 thousand juveniles in 2014 (Table 3, Graph 2).

Table 3. Production of fish larva in hatcheries and nurseries, by species, 2014-2016
in thousand juveniles

| Species | 2014 | 2015 | 2016 | $\begin{aligned} & \text { Change (\%) } \\ & \text { 2015/2014 } \end{aligned}$ | $\begin{aligned} & \text { Change( \%) } \\ & \text { 2016/2015 } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 399,574 | *401,253 | 435,224 | *0.4 | 8.5 |
| European seabass | 173,346 | *154,915 | 163,316 | *-10.6 | 5.4 |
| Gilthead seabream | 212,046 | *232,221 | 258,137 | *9.5 | 11.2 |
| Trout | 7,655 | 7,518 | 6,947 | -1.8 | -7.6 |
| Other fish | 6,527 | 6,599 | 6,824 | 1.1 | 3.4 |

*Revised data

Graph 2. Production of fish larva in hatcheries and nurseries, by species, 2014-2016


## C. EMPLOYED PERSONS BY TYPE OF EMPLOYMENT RELATIONSHIP

The changes in the total annual employment are as follows:

- The total number of employed persons recorded an increase of $5.3 \%$ in 2016 compared with 2015, in relation to an increase of $0.1 \%$ * recorded for $2015 / 2014$. More specifically, the total number of employees amounted to 4,287 in 2016, 4,073* in 2015 and 4,069 in 2014 (Table 4).

More specifically, the changes in employment, by type of employment relationship, are as follows:

- Permanent staff recorded an increase of $1.8 \%$ in 2016 compared with 2015, in relation to an increase of $0.3 \%$ * recorded for 2015/2014. More specifically, permanent employees amounted to 3,574 in 2016, 3,510* in 2015 and 3,500 in 2014 (Table 4).
- Temporary staff recorded an increase of $26.6 \%$ in 2016 compared with 2015, in relation to a decrease of $1.1 \%^{*}$ recorded for 2015/2014. More specifically, temporary employees amounted to 713 in 2016, 563* in 2015 and 569 in 2014.

Table 4. Employed persons, 2014-2016

| Type of employment | 2014 | 2015 | 2016 | $\begin{gathered} \text { Change (\%) } \\ \text { 2015/2014 } \end{gathered}$ | $\begin{array}{r} \text { Change (\%) } \\ 2016 / 2015 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 4,069 | *4,073 | 4,287 | *0.1 | 5.3 |
| Permanent staff | 3,500 | *3,510 | 3,574 | *0.3 | 1.8 |
| Temporary staff | 569 | *563 | 713 | *-1.1 | 26.6 |

## *Revised data

Graph 3. Persons employed in aquaculture units, 2014-2016


## EXPLANATORY NOTES

Survey on The Hellenic Statistical Authority has been conducting on an annual basis, since 1995, a aquaculture statistical survey on Aquaculture.

Purpose The main purpose of the Survey on Aquaculture is to compile data on the cultivation methods, production and value of the cultivated species by cultivation method, production of fish larva in hatcheries/nurseries and on the number of employees.

Legal basis Regulation (EC) 762/2008 of the European Parliament and of the Council of 9 July 2008 on the submission by Member States of statistics on aquaculture and repealing Council Regulation (EC) No 788/96

Reference period The survey data refer to the year 2016.

## Survey Methodology and Definitions

1. The survey is a census survey and it covers all the aquaculture units operating in Greece
2. The statistical unit of the survey on aquaculture is the enterprise activated in the rearing or cultivation of aquatic organisms (fish, mollusks, crustaceans and aquatic plants) under controlled breeding and rearing environment, aiming at achieving the largest production in the most efficient and economical manner
3. Rearing/culture is every form of intervention in the growing procedure aiming at reinforcing production (e.g. renewal of stock, food, protection from natural enemies, etc.)
4. The farming / cultivation can be performed in freshwater, brackish water and seawater.

References More information, such as tables, samples of questionnaires, etc. on Survey on Aquaculture are available at http://www.statistics.gr/en/statistics/-/publication/SPA06/-

