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# **AQUACULTURE SURVEY: 2022**

The Hellenic Statistical Authority (ELSTAT) announces the results of the Survey on Aquaculture for the reference year 2022.

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

In 2022 compared with 2021, total production and corresponding value of aquaculture reared – cultivated species in Greece, decreased by 1.3% and increased by 32.9%, respectively. More specifically, 141,901.9 tonnes with a total value of 852,648.2 thousand euros were farmed in 2022, while 143,811.9 tonnes with a total value of 641,733.5 thousand euro were farmed in 2021 (Table 1).

Table 1. Quantity and value of reared or cultivated species, 2021 - 2022

Quantity in tonnes, value in thousand euros

	2021		2022		Μεταβολή (%) 2022/2021	
Reared - Cultivated species	Quantity	Value	Quantity	Value	Quantity	Value
Grand total	143,811.9	641,733.5	141,901.9	852,648.2	-1.3	32.9
Fish	130,062.4	635,784.2	130,972.2	845,612.5	0.7	33.0
Common sole	2.4	10.2	0.6	3.9	-74.0	-62.0
Meagre	4,200.6	22,136.7	5,697.0	42,139.6	35.6	90.4
European seabass	51,231.7	275,286.3	47,145.3	342,742.6	-8.0	24.5
White seabream	1.8	6.0	7.1	23.0	291.4	281.7
Gilthead seabream	67,058.7	294,634.2	70,314.8	403,776.9	4.9	37.0
Red porgy	4,589.6	31,499.7	4,792.9	44,180.3	4.4	40.3
Marine fishes nei	2,977.5	12,211.1	3,014.4	12,746.2	1.2	4.4
Crustaceans	144.4	198.7	120.1	155.4	-16.8	-21.8
Kuruma prawn	0.5	3.2	1.3	9.0	150.5	180.8
Marine crabs nei	143.9	195.5	118.8	146.4	-17.4	-25.1
Shellfish (bivalve molluscs)	13,539.8	5,072.0	10,748.7	6,080.5	-20.6	19.9
Μύδια	13,508.3	4,991.5	10,733.9	5,997.1	-20.5	20.1
Mediterranean mussels	31.5	80.5	14.9	83.4	-52.9	3.6
Aquatic Plants-Algae	62.1	551.6	57.5	652.6	-7.3	18.3
Spiroulina	62.1	551.6	57.5	652.6	-7.3	18.3
Fish eggs	3.2	127.0	3.4	147.1	6.5	15.8

<sup>(1)</sup> Revised data

Note: 1. Any discrepancies between sums and totals as well as percentages are due to rounding.

The changes in the quantity and value of the reared or cultivated species, by main taxonomic group, as presented in Table 1, are as follows:

Fish: in 2022 compared with 2021, the quantity and the corresponding value increased by 0.7% and 33.0% respectively. More specifically, 130,972.2 tonnes of fish with a total value of 845,612.5 thousand euro were farmed in 2022, while 130,062.4 tonnes of fish with a total value of 635,784.2 thousand euro were farmed in 2021.

Crustaceans: in 2022 compared with 2021, the quantity and the corresponding value decreased by 16.8% and 21.8% respectively. More specifically, 120.1 tonnes of crustaceans with a total value of 155.4 thousand euro were farmed in 2022 and 144.4 tonnes with a total value of 198.7 thousand euro were farmed in 2021.

## Information on methodological issues:

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<sup>2.</sup> Data regarding the fish species "Rainbow trout", "Flathead grey mullet", "Common carp", "Shi drum", "Sharpsnout seabream", "White seabream", "Salmon", "Eel", "Sturgeons nei", and "Greater amberjack" as well as the data regarding the Shellfish (bivalve molluscs) species "European flat oyster" and "Striped venus" are confidential for the year 2022 and therefore are not published separately. For reasons related to compliance with the European Statistics Code of Practice on completeness, cohesion and comparability of the produced statistics, the relevant data were added to the variable "Other Fish" and "Other Shellfish" of the above corresponding classification groups (Fish and Shellfish) respectively.

**Shellfish (bivalve molluscs)**: in 2022 compared with 2021, the quantity and the corresponding value decreased by 20.6% and increased by 19.9% respectively. More specifically, 10,748.7 tonnes of shellfish with a total value of 6,080.5 thousand euro were farmed in 2022 and 13,539.8 tonnes with a total value of 5,072.0 thousand euro were farmed in 2021.

**Aquatic Plants-Algae**: in 2022 compared with 2021, the quantity and the corresponding value decreased by 7.3% and increased by 18.3% respectively. More specifically, 57.5 tonnes of fish eggs with a total value of 652.6 thousand euro were farmed in 2022 and 62.1 tonnes with a total value of 551.6 thousand euro were farmed in 2021.

**Fish eggs**: in 2022 compared with 2021, the quantity and the corresponding value increased by 6.5% and 15.8% respectively. More specifically, 3.4 tonnes of fish eggs with a total value of 147.1 thousand euro were farmed in 2022 and 3.2 tonnes with a total value of 127.0 thousand euro were farmed in 2021.

The changes in the quantity and value of the farmed or cultivated aquaculture species, **by type of water**, as presented in Table 2, are as follows:

**Fresh water**: in 2022 compared with 2021, the quantity and the corresponding value increased by 17.0% and 28.0% respectively. More specifically, 2,652.5 tonnes with a total value of 12,307.3 thousand euro were farmed in 2022 and 2,267.6 tonnes with a total value of 9,612.2 thousand euro were farmed in 2021.

**Brackish water**: in 2022 compared with 2021, quantity decreased by 12.2% and corresponding value increased by 0.1% respectively. More specifically, 756.0 tonnes with a total value of 2,347.5 thousand euro were farmed in 2022 and 861.5 tonnes with a total value 2,346.3 thousand euro were farmed in 2021.

**Sea water**: in 2022 compared with 2021, quantity and corresponding value decreased by 1.6% and increased by 33.1% respectively. More specifically, 138,493.4 tonnes with a total value of 837,993.4 thousand euro were farmed in 2022 and 140,682.8 tonnes with a total value of 629,775.0 thousand euro were farmed in 2021.

Table 2. Quantity and value of aquaculture production, by type of water, 2021 – 2022

Quantity in tonnes, value in thousand euros

	<b>2021</b> <sup>(1)</sup>		2022		Change (%) 2022/2021	
Water Type	Quantity	Value	Quantity	Value	Quantity	Value
Fresh	2,267.6	9,612.2	2,652.5	12,307.3	17.0	28.0
Brackish	861.5	2,346.3	756.0	2,347.5	-12.2	0.1
Sea	140,682.8	629,775.0	138,493.4	837,993.4	-1.6	33.1

(1) Revised data.

**Note:** Any discrepancies between sums and totals as well as percentages are due to rounding.

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

The changes in the produced quantity of fish larva, by species, as presented in Table 3, are as follows:

**Overall production of fish larva:** total quantity of fish larva decreased by 8.1% in 2022 compared with 2021. More specifically, fish larva amounted to 329,050 thousand juveniles in 2022 and 358,186 thousand juveniles in 2021.

More specifically, the production of fish larva by main species:

**European seabass:** the quantity of larva increased by 0.4% in 2022 compared with 2021. More specifically, european seabass larva amounted to 133,482 thousand juveniles in 2022 and 133,007 thousand juveniles in 2021.

**Gilthead seabream**: the quantity of larva decreased by 11.6% in 2022 compared with 2021. More specifically, gilthead sea bream larva amounted to 174,256 thousand juveniles in 2022 and 197,044 thousand juveniles in 2021.

**Red porgy:** the quantity of larva decreased by 33.4% in 2022 compared with 2021. More specifically, red porgy larva amounted to 11,945 thousand juveniles in 2022 and 17,946 thousand juveniles in 2021.

**Rainbow trout:** the quantity of larva increased by 23.5% in 2022 compared with 2021. More specifically, rainbow trout larva amounted to 7,665 thousand juveniles in 2022 and 6,209 thousand juveniles in 2021.

**Other fish:** the quantity of larva decreased by 57.2% in 2022 compared with 2021. More specifically, other fish larva amounted to 1,702 thousand juveniles in 2022 and 3,980 thousand juveniles in 2021.

Table 3. Production of fish larva in hatcheries and nurseries, by species, 2021 – 2022

In thousand juveniles

	2021	2022	Change (%) 2022/2021	
Total	358,186	329,050	-8.1	
European seabass	133,007	133,482	0.4	
Gilthead seabream	197,044	174,256	-11.6	
Red porgy	17,946	11,945	-33.4	
Rainbow trout	6,209	7,665	23.5	

	2021	2022	Change (%) 2022/2021
Other Fish	3,980	1,702	-57.2

## C. EMPLOYED PERSONS BY TYPE OF EMPLOYMENT RELATIONSHIP

The changes in the total annual employment as presented in Table 4, are as follows:

The **total** number of employed persons increased by 4.5% in 2022 compared with 2021. More specifically, the total number of employees amounted to 4,046 in 2022 and 3,871 in 2021.

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

**Permanent staff** increased by 4.4% in 2022 compared with 2021. More specifically, permanent employees amounted to 3,597 in 2022 and 3,443 in 2021.

**Temporary staff** increased by 5.2% in 2022 compared with 2021. More specifically, temporary employees amounted to 449 in 2022 and 427 in 2021.

Table 4. Number of employed persons in aquaculture units, 2021 – 2022

	2021	2022	Change (%) 2022/2021	
Total	3,871	4,046	4.5	
Permanent staff	3,443	3,597	4.4	
Temporary staff	427	449	5.2	

## **EXPLANATORY NOTES**

**Survey on aquaculture** The Hellenic Statistical Authority has been conducting on an annual basis, since 1995, a 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 2022.

## Survey Methodology and Definitions

- Survey Methodology 1. The survey is a census survey, and it covers all aquaculture units operating in Greece.
  - and Definitions 2. The statistical unit of the survey on aquaculture is the enterprise activated in the rearing or cultivation of aquatic organisms (fish, molluscs, 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/cultivation 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/-